

# City of Fairfax Debris Management Plan



Department of Public Works  
10455 Armstrong St.  
City of Fairfax, VA 22030

August, 2006

**“This Document was prepared by Dewberry & Davis LLC on behalf of the Metropolitan Washington Council of Governments supported by subgrants awarded by the Government of the District of Columbia. The opinions, findings and conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of the Government of the District of Columbia.”**

## TABLE OF CONTENTS

I.	Authority.....	1
II.	Overview .....	1
A.	Background .....	1
B.	Purpose .....	2
C.	General Approach.....	2
D.	Planning Basis and Assumptions.....	2
E.	Federal Assistance .....	3
III.	Debris Management Staff Responsibilities.....	4
A.	Debris Response and Recovery Organization and Responsibilities .....	4
1.	Debris Manager .....	4
2.	Debris Removal Coordinator.....	6
3.	Disaster Operations Center Debris Liaison Officer .....	7
4.	Public Works Department Debris Coordinator.....	7
5.	Utilities Department Director .....	8
6.	Utilities Debris Coordinator .....	8
7.	Department of Parks and Recreation .....	8
8.	Parks and Recreation Debris Coordinator .....	9
9.	Debris Management Center Staff .....	9
10.	Public Information Officer .....	10
B.	Debris Response and Recovery Support Agencies .....	12
1.	Fire and Emergency Medical Services .....	12
2.	Police / Sheriffs Department.....	12
3.	Department of Health .....	12
4.	Office of Property Management .....	12
5.	Water and Sewer Authority .....	12
6.	Electric Power Company .....	13
IV.	Debris Management Response and Recovery Operations .....	13
A.	Damage Assessment Teams .....	13
B.	Phase I – Initial Response.....	14
C.	Phase II - Recovery .....	15
D.	Phase II Debris Removal and Disposal Overview .....	15
E.	Phase II Debris Removal and Disposal Operations .....	16
1.	Debris Contractor Oversight Team.....	17
a.	Roving Monitors .....	18
b.	Load Site Monitors .....	19
c.	Disposal Site Monitors.....	20
2.	Franchise Garbage Contractors.....	20
3.	Household Hazardous Waste Drop-Off Locations. ....	20
4.	Utility Company Property .....	21
5.	Equipment Assets .....	21
6.	Contractor Debris Removal and Disposal Operations .....	21
7.	Temporary TDSR Sites .....	22
8.	Load Ticket Disposition .....	22
9.	Temporary TDSR Site Setup and Closeout Procedures .....	23
10.	Private Property Debris Disposal.....	23
V.	Weapons of Mass Destruction/Terrorism Event.....	23
VI.	Administration and Logistics.....	24

**LIST OF FIGURES**

Figure 1 - Debris Management Center Organization.....	11
Figure 2 - Sample Load Ticket.....	17

**LIST OF TABLES**

Table 1 - City Debris Estimates.....	16
--------------------------------------	----

**LIST OF APPENDICES**

Appendix A	Acronyms and Definitions
Appendix B	Debris Control Zone Index Map
Appendix C	Critical Facilities
Appendix D	Primary Road Clearance List
Appendix E	Temporary Debris Staging and Reduction Sites
Appendix F	Debris Contract Oversight Team Standard Operating Guidelines and Approved Contractor List
Appendix G	Debris Removal and Disposal Monitoring Plan
Appendix H	Debris Clearing, Removal, and Disposal Guidelines
Appendix I	Debris Management Equipment Assets
Appendix J	Federal Emergency Management Agency (FEMA) Debris Management Policies and Guidelines

**LIST OF EXHIBITS**

Exhibit A	Sample Scope of Work
Exhibit B	Price Proposal Form
Exhibit C	Sample Request for Letters of Interest

## ***I. AUTHORITY***

This plan is developed, promulgated, and maintained under the following Local, State and Federal statutes and regulations:

- Commonwealth of Virginia Emergency Operations Plan and Sub-plans, January 2002
- Code of Virginia, Title 44, Chapter 3 (Commonwealth of Virginia Emergency Services and Disaster Law of 1973), Chapter 75 and Chapter 146, dated 2001
- Code of Virginia, Title 3, Chapter 1
- Code of Virginia, Title 32, Chapter 5
- Code of Virginia, Title 42, Chapter 1
- Code of Virginia, Title 10, Chapter 1
- Constitution of Virginia, Article X, Section 9
- Commonwealth of Virginia, Office of the Governor, Executive Order 73, dated 1997
- Public Law 93-288 as amended by Public Law 100-107, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, and in this plan “the Stafford Act.”
- Public Law 81-920, Federal Civil Defense Act of 1950, as amended.
- CFR, Title 44, Part 200 et seq.
- City of Fairfax Emergency Disaster Operations Plan, dated September 1999

## ***II. OVERVIEW***

### **A. Background**

The institutions of the City of Fairfax, along with the natural and built environment, present opportunities for a number of potential natural and technological disasters or emergencies. The Emergency Service Coordinator is responsible for planning and emergency preparedness, response and recovery, and mitigation activities. The City coordinates with Fairfax County Office of Emergency Management and the Virginia Department of Emergency Management (VDEM) in response to disasters, emergencies, severe weather conditions, and other catastrophic events.

The City subscribes to the guidance contained in the City’s Emergency Disaster Operations Plan (EOP), developed by the City of Fairfax Department of Fire and Rescue Services with the assistance of the City of Fairfax Police Department and the Fairfax County Office of Emergency Management. The EOP establishes responsibilities for each City government agency and sets forth lines of authority and organizational relationships that are essential for the protection of the public. The EOP also establishes the concepts and policies under which all elements of the City government will operate during disasters and emergencies by providing for the integration of those resources.

This plan is based on guidance provided by the City’s EOP. This plan focuses on the types of activities that are likely to be required during a disruption or emergency, without regard to the type or cause of that disruption or emergency.

## **B. Purpose**

This plan has been developed to provide the framework for City government and other entities to clear and remove debris generated during a public emergency within the City of Fairfax city limits. This plan unifies the efforts of public and private organizations for a comprehensive and effective approach to:

- Provide organizational structure, guidance, and standardized guidelines for the clearance, removal, and disposal of debris caused by a major debris-generating event.
- Establish the most efficient and cost effective methods to resolve disaster debris removal and disposal issues.
- Implement and coordinate private sector debris removal and disposal contracts to maximize cleanup efficiencies.
- Expedite debris removal and disposal efforts that provide visible signs of recovery designed to mitigate the threat to the health, safety, and welfare of City residents.
- Coordinate partnering relationships through communications and pre-planning with County, State, and Federal agencies that have debris management responsibilities.

## **C. General Approach**

The City of Fairfax is vulnerable to numerous natural and technological hazards, including severe weather and hazardous materials spills. Tropical storms, hurricanes, tornadoes, severe lightning, wind storms, hail and floods pose the highest natural threats to the City. Critical government and private facilities are potential targets for terrorist attack. The City can manage many disaster situations with internal resources. However, there are potential debris-generating events that may overwhelm the City's assets and capabilities.

This plan establishes the framework within which the City will respond and coordinate the removal and disposal of debris generated by potential manmade and natural disasters. This plan will also address the potential role that State and Federal agencies and other groups will take during a debris operation.

This plan defines the roles and responsibilities of local emergency managers with respect to debris planning prior to an event and actions following a major debris-generating event.

## **D. Planning Basis and Assumptions**

Natural disasters such as hurricanes, tornadoes, and flooding precipitate a variety of debris scenarios which include, but are not limited to, trees and other vegetative organic matter, construction materials, appliances, personal property, mud, and sediment. Man-made disasters such as terrorist attacks may result in a large number of casualties and heavy damage to buildings and basic infrastructure. Crime scene constraints may hinder normal debris operations, and contaminated debris may require special handling. These factors will necessitate close coordination with local, State and Federal law enforcement, health, and environmental officials.

This plan takes an all-hazards approach to identifying and responding to the following hazards that may pose a threat to the City of Fairfax:

- Natural Hazards – severe weather, hurricanes, tornadoes, flooding, hail, or earthquakes;
- Human-caused Events and Hazards – urban fires, special events, civil disorder, or transportation accidents; and
- Terrorist Incidents – bomb threats or attacks, sabotage, hijacking, armed insurrection, or Weapons of Mass Destruction (WMD) incidents.

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of removal and disposal methods utilized, the associated costs, and the speed with which the problem can be addressed. Further, the quantity and type of debris generated from any particular disaster will be a function of the location and type of event experienced, as well as its magnitude, duration, and intensity.

For planning purposes and for pre-positioning response assets, this plan assumes that the magnitude of the event exceeds the capacities of the City of Fairfax.

The fact that this plan is based on an event that exceeds the City of Fairfax's capacities in no way diminishes the value of the plan for use in response to other types and categories of events. This plan establishes a general framework that can, with minor modifications, be used in any debris-generating event.

This plan addresses the clearing, removal, and disposal of debris generated by the above hazards based on the following assumptions:

- A major natural or man-made disaster that requires the removal of debris from public or private lands and waters could occur at any time;
- The amount of debris resulting from a major natural disaster will exceed The City of Fairfax's in-house removal and disposal capabilities;
- The City of Fairfax will contract for additional resources to assist in the debris removal, reduction, and disposal processes;
- Federal assistance will be requested to supplement the City of Fairfax's debris capabilities in coordination with the City's Debris Manager.

## **E. Federal Assistance**

Regardless of the scope of a disaster, the affected communities and States often need the assistance of the Federal government when responding to and recovering from the event. It is not necessary for the community to exhaust its resources before it requests Federal assistance.

The City Manager and the Emergency Service Coordinator will request Federal assistance when the debris-generating event exceeds the City of Fairfax in-house debris clearing, removal, and disposal capabilities. The request will be submitted through the Virginia Department of Emergency Management (VDEM). VDEM will forward the request for a mission assignment to the Federal Emergency Management Agency (FEMA).

Additionally, the U.S. Army Corps of Engineers (USACE) may provide a liaison to the City's Emergency Operations Center (EOC) when activated. This liaison will serve as an advisor to the EOC staff providing advice as needed and ensuring that the USACE is prepared to respond when tasked.

The USACE will alert a Debris Planning and Response Team (PRT) and the Advance Contracting Initiative (ACI) Contractor under contract for that area and have them ready to respond when a mission assignment is received. Once the USACE receives a mission assignment from FEMA, the management groups for both the PRT and ACI Contractor will be available to meet with the City Debris Manager to conduct contingency planning as required.

The USACE will also provide staffing to the Debris Management Center (DMC) when activated to ensure a coordinated debris operation. USACE will coordinate with the DMC staff on the use of any pre-identified temporary debris storage and reduction sites (TDSR) and disposal sites, and identify/acquire other sites as required to accomplish the mission assignment.

While this request is being processed, local and State government officials should not delay in taking the necessary response and recovery actions. Such actions should not depend on the availability of Federal assistance.

### ***III. DEBRIS MANAGEMENT STAFF RESPONSIBILITIES***

#### **A. Debris Response and Recovery Organization and Responsibilities**

One of the primary functions of this plan is to clearly delineate a basic organization and assign specific responsibilities. During the conduct of debris operations, many issues will arise that are not specifically mentioned in this plan. However, responsibilities are sufficiently defined so that unexpected issues can be assigned and resolved efficiently.

This section of the plan provides a listing of primary debris-related responsibilities for directors and managers, as well as debris-specific assignments to address tasks and issues that normally arise during debris operations.

##### **1. Debris Manager**

The Director of Public Works will assume the role of the City Debris Manager (DM). The City Debris Manager's responsibilities include, but are not limited to, the following with respect to any and all debris management issues:

- Provide a DMC Liaison Officer to the City Disaster Operations Center (DOC) to coordinate debris requests and actions as required.
- Provide a Public Works Debris Coordinator to the DMC staff to coordinate all agency debris assignments.
- Coordinate all media reports on debris operations with the Community Relations Office Public Information Officer (PIO).

- Provide personnel and equipment to assist in clearing major evacuation routes and access to critical facilities.
- Provide personnel and equipment to remove and dispose of debris.
- Provide personnel and equipment to operate and staff the Debris Contractor Oversight Team (DCOT) element of the DMC, including communications equipment, transportation, etc.
- Ensure that the DMC is provided all needed administrative staff and equipment support, including administrative support personnel, computers, desks, chairs, etc.
- Receive regular updates from the Debris Removal Coordinator (DRC) regarding cleanup progress and any problems encountered or expected.
- Identify agency staff members for debris management monitoring duties (Roving, Load Site, and Disposal Site Monitors) and provide list of names to the DCOT supervisor.
- Provide yearly training and refresher training for all personnel assigned to debris management monitoring responsibilities.
- Provide personnel and equipment to the Damage Assessment Team, as requested.
- Communicate timely information to the City Manager and the City DOC staff regarding the status of the debris clearing, removal, and disposal operations.
- Assure that the City is represented at all meetings with other government and private agencies involved with the debris cleanup operation.
- Coordinate with appropriate County, State, and Federal agencies, including FEMA, USACE, and others as appropriate.
- Implement the following notification system to rapidly notify appropriate staff as to where and when to report for duty. This system must be kept up-to-date to ensure key staff can readily be reached. The notification system should be maintained in such a manner that notification can be made at any time.

**Level I** – Involves an event likely to be within the capabilities of local government and results in only limited (does not require involvement beyond the duty officer and several assistants) need for State assistance. Typical daily activities continue while the event is monitored. Notification is limited to those agencies that have normal day-to-day emergency responsibilities or regulatory requirements. If the event occurs during non-duty hours, the duty officer may be required to report to the DOC to monitor the situation and respond to requests for assistance.

**Level II** – Involves any event that has the potential to develop into an emergency or disaster and will likely require the assistance of at least two or three City agencies. A limited staff will be in place in the DOC, staffed with City Emergency Services (ES) personnel and those agencies essential to the response. Twenty-four hour staffing

may be required. Daily activities are altered to accommodate the situation. All applicable agencies are alerted.

**Level III** – Involves an event which has become, or is becoming, an emergency or disaster and requires significant City and State response and possible Federal response and recovery assistance (local government capabilities clearly exceeded). The direction and control, primary resources, mass care, and environmental and natural resources groups are at least partially staffed on a 24-hour basis in the DOC. Support agencies are alerted and most City ES personnel are assigned to emergency/disaster functions. The governor will declare a State of Emergency. The City EOP is implemented. The Advanced Element of the FEMA Emergency Response Team (ERT) and State Liaison may be requested.

**Level IV** - Involves a declared disaster, which requires an extensive City and State response where the State and local governments are clearly overwhelmed. The City DOC, is fully staffed for 24-hour operations by all of the primary City agencies. The State requests implementation of the National Response Plan and the presence of the FEMA Region III State Liaison and the ERT, if not previously requested.

- Overall control of the DMC.
- Convene emergency debris coordinating meetings.
- Appoint a Debris Removal Coordinator (DRC) responsible for daily operational control of the DMC.
- Ensure that the DMC is provided all needed administrative staff support.
- Provide media relations in coordination with the City's Community Relations Office.

The Debris Manager will dispatch a DMC Liaison Officer to the City DOC to coordinate and respond to any debris removal or disposal request. Actions will focus on keeping track of Debris Control Zone assignments and progress of the initial debris clearance during Phase I of debris management operations from emergency evacuation routes and critical facilities. The DMC Liaison Officer will keep the City DOC staff informed of any problems encountered or expected.

*Point of Contact: Director of Public Works, 703-385-7946*

## **2. Debris Removal Coordinator**

The Debris Manager will be supported by a joint debris staff made up of personnel from Public Works Department (PW), Parks and Recreation Department (P&R), and Utilities Department and other City department staff personnel. The joint staff will constitute the daily operating element of the DMC.

The Debris Removal Coordinator (DRC) is responsible for daily operational control of the DMC staff. The DRC will receive current information on the severity of the disaster from the DMC Liaison Officer located at the City DOC. All requests for debris removal or disposal from the emergency response staff will go through the DMC Liaison Officer

to the DRC. Requests for debris removal from public facilities and roadways will be reviewed and approved by the DRC before being directed to the appropriate DMC Debris Coordinators (PW, P&R and Utilities) to implement the request.

- The DRC will appraise the extent of damage and resulting debris and issue directives to the appropriate Debris Coordinators who in turn will notify their departments to execute the tasking as defined by their department's Standard Operating Guidelines.
- The DRC will ensure that all contractor debris removal and disposal operations are properly monitored utilizing personnel assigned to the Debris Contractor Oversight Team (DCOT).
- The DRC will keep the City DM and DMC staff informed on all ongoing debris management operations through, at a minimum, daily meetings and/or reports.
- The DRC will maintain a daily journal and file on all debris related documents and issues.

*Point of Contact: Department of Public Works, Street Division Superintendent, 703-385-7983*

### **3. Disaster Operations Center Debris Liaison Officer**

The DOC Debris Liaison Officer will be located at the City DOC and will be responsible for coordinating with the DMC staff all requests for debris activities initiated by the City DOC staff.

*Point of Contact: Department of Public Works, Street Division Superintendent, 703-385-7983 OR his designee*

### **4. Public Works Department Debris Coordinator**

The Public Works Debris Coordinator will:

- Maintain a listing of all available Public Works equipment identified for possible debris clearing and disposal missions.
- Coordinate all Public Works debris assignments approved by the Debris Manager.
- Ensure that required logistical support is available, including cell phones, transportation, etc.
- Ensure that the Debris Manager is kept informed of cleanup progress and any problems encountered or expected.

*Primary Point of Contact: Willis Shaffer, Department of Public Works, Street Division Superintendent, 703-385-7983 OR his designee*

## **5. Utilities Department Director**

The Utilities Department Director's responsibilities include, but are not limited to, the following with respect to any and all debris management activities:

- Provide a Utilities Department Debris Coordinator to the DMC staff to coordinate all Utility Department personnel and equipment debris assignments.
- Provide personnel and equipment to assist Public Works in clearing major evacuation routes and access to critical facilities during Phase I of debris management operations.
- Provide personnel and equipment to assist Public Works in the removal and disposal of debris during Phase II of debris management operations as directed by the DRC through the Utilities Debris Coordinator.
- Ensure that the Utilities Debris Coordinator at the DMC is provided all needed logistics support, including cell phone, transportation, etc.
- Ensure that the Utilities Debris Coordinator keeps the Debris Manager informed of clearing progress and any problems encountered or expected.

*Primary Point of Contact: Utilities Department Director, 703-385-7920 OR his designee*

## **6. Utilities Debris Coordinator**

The Utilities Debris Coordinator will:

- Maintain a listing of all available Utilities equipment identified for possible debris removal and disposal missions.
- Coordinate all Utilities debris assignments approved by the DRC.
- Ensure that required logistical support is available, including cell phones, transportation, etc.
- Ensure that the DRC is kept informed of cleanup progress and any problems encountered or expected.

*Primary Point of Contact: Utilities Department Director, 703-385-7920 OR his designee*

## **7. Department of Parks and Recreation**

The Director of Parks and Recreation's (P&R) responsibilities include, but are not limited to, the following with respect to any and all debris management activities:

- Provide a P&R Debris Coordinator to the DMC staff to coordinate all P&R debris assignments.

- Provide personnel and equipment to assist Public Works in clearing major evacuation routes and access to critical facilities during Phase I of debris management operations.
- Provide personnel and equipment to assist in the removal and disposal of debris (Phase II) as directed by the DRC through the P&R Debris Coordinator.
- Provide specialized equipment and trained operators to assist in the clearing and removal of woody vegetation from along critical rights-of-way.
- Ensure that debris removal from parks and recreational facilities is coordinated through and approved by the Debris Manager through the P&R Debris Coordinator.
- Ensure that the P&R Debris Coordinator is provided all needed logistical support, including cell phones, transportation, etc.
- Ensure that the P&R Debris Coordinator keeps the Debris Manager informed of cleanup progress and any problems encountered or expected.
- Assist in TDSR site investigations.
- Provide digital map files of all identified P&R property greater than 10 acres.
- Coordinate with the Debris Manager for the removal, storage, burning, and disposal of debris at debris collection/management sites at P&R parks.

*Primary Point of Contact: Parks & Recreation Director, 703-385-7853 OR his designee*

## **8. Parks and Recreation Debris Coordinator**

The P&R Debris Coordinator will:

- Maintain a listing of all available P&R equipment identified for possible debris removal and disposal missions.
- Coordinate all P&R debris assignments approved by the DRC.
- Ensure that required logistical support is available, including cell phones, transportation, etc.
- Ensure that the DRC is kept informed of cleanup progress and any problems encountered or expected.

*Point of Contact: Parks & Recreation Director, 703-385-7853 OR his designee*

## **9. Debris Management Center Staff**

The DMC is organized to provide a central location for the coordination and control of all debris management requirements. The DMC will be located at the City of Fairfax Property Yard, 3410 Pickett Road, Fairfax, VA 22031.

The DMC organizational diagram shown in Figure 1 identifies the DMC staff positions required to coordinate the actions necessary to remove and dispose of debris using both City and contractor assets.

Specific DMC staff actions will include the following:

- Making recommendations for City force account and contractor work assignments and priorities based on the City's Debris Control Zones. Appendix B contains a map showing the boundaries of the various Debris Control Zones.
- Reporting on debris removal and disposal progress, and preparing status briefings.
- Providing input to the Community Relations Office PIO on debris removal and disposal activities.
- Coordinating with the County and State on debris issues affecting adjacent jurisdictions.
- Coordinating City debris removal and disposal operations with solid waste managers and environmental regulators from the County and State.
- Coordinating with the following Federal agencies in the event of a major natural or man-made debris-generating disaster that exceeds the City's capabilities:
  - Federal Emergency Management Agency (FEMA)
  - U.S. Army Corps of Engineers (USACE)
  - Local Office of the Federal Bureau of Investigation (FBI)

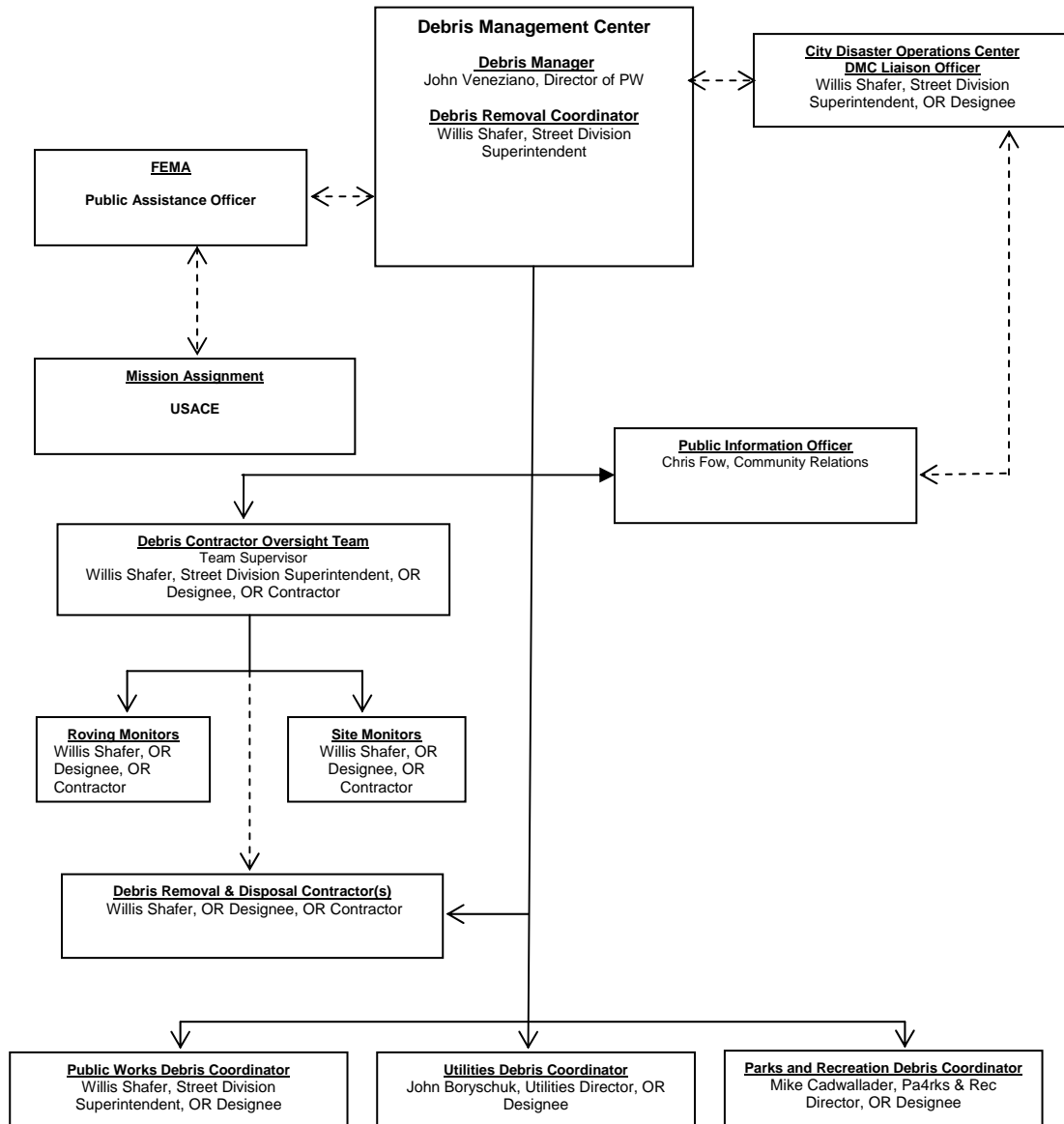
## **10. Public Information Officer**

The Community Relations Office will provide a PIO to work directly with the DMC staff. The PIO will develop a proactive information management plan. Emphasis will be placed on actions that the public can perform to expedite the cleanup process. Flyers, newspapers, radio, and TV public service announcements will be used to encourage public cooperation for such activities as:

- Segregating Household Hazardous Waste (HHW);
- Placing disaster debris at the curbside;
- Keeping debris piles away from fire hydrants and valves;
- Reporting locations of illegal dump sites or incidents of illegal dumping;
- Segregating recyclable materials; and

- Disseminate pickup schedules through the local news media.

*Point of Contact: Chris Fow, Community Relations Office, 703-385-7947*



**Figure 1 - Debris Management Center Organization**

## **B. Debris Response and Recovery Support Agencies**

Specific responsibilities of the various supporting agencies are shown in the sections that follow:

### **1. Fire and Emergency Medical Services**

- Respond to fire and other emergencies at TDSR sites.
- Respond to request to investigate and handle hazardous materials incidents.
- Issue bans on open burning based upon assessment of local conditions and ensure dissemination of information to the public.

*Primary Point of Contact: Fire Chief, 703-385-7874*

### **2. Police / Sheriffs Department**

- Assist in monitoring illegal dumping activities.
- Assist in monitoring TDSR sites to ensure compliance with local traffic regulations.
- Coordinate traffic control at all loading sites and at entrances to and from TDSR sites.

*Primary Point of Contact: Richard Rapport, Police Chief, 703-385-7960*

### **3. Department of Health**

- Assist in monitoring TDSR site operations and closeout activities.
- Assist as necessary on all environmental and health issues.  
(Refer to Fairfax County Health Department SOPs)

*Primary Point of Contact: County of Fairfax Department of Health, 703-246-2300*

### **4. Office of Property Management**

Coordinate debris removal and disposal requirements on public facilities with the Debris Manager.

*Primary Point of Contact: Department of Public Works Operations Director, 703-385-7995*

### **5. Water and Sewer Authority**

Coordinate debris removal and disposal requirement at Water and Sewer Authority facilities with the Debris Manager.

*Primary Point of Contact: Utilities Department Director, 703-385-7920*

## **6. Electric Power Company**

Coordinate with the Debris Manager with regards to debris removal along electrical easements and rights-of-way to ensure that all lines are de-energized.

- Provide a debris coordinator to the DMC.

*Primary Point of Contact: Dominion Virginia Power, 1-888-667-3000*

## **IV. DEBRIS MANAGEMENT RESPONSE AND RECOVERY OPERATIONS**

The City DM will be the single point of contact to coordinate and control all personnel and equipment responding to a major debris-generating event. This plan provides guidance for the efficient and effective control and coordination of initial debris assessments through debris clearance, removal, and disposal operations.

### **A. Damage Assessment Teams**

The Office of Code Administration, with the assistance of the Public Works Department, Utilities, Finance/Real Estate Assessments, Schools Administration, Parks and Recreation Department and other agencies, is responsible for damage assessment.

The Assistant Chief Code Administrator will designate a Damage Assessment Coordinator (DAC) who will be responsible for organizing and deploying Damage Assessment Teams (DAT). The DAC is responsible for coordinating impact assessment for all City public structures, equipment, and debris clearance immediately following a large-scale disaster. Impact assessments are performed by DAT and used to prioritize impacted areas and resource needs.

The DMC Public Works Debris Coordinator will have the primary mission of coordinating the efforts of Public Works personnel to identify debris impacts on critical roads and make initial estimates of debris quantities. Based on this prioritization, the DRC will issue urgent assignments to clear debris from at least one lane on all evacuation routes and identified primary and secondary roads to expedite the movement of emergency service vehicles such as fire, police, and medical responders. A listing of critical facilities is provided in Appendix C. A priority primary road clearance list is found in Appendix D.

The DAT will conduct initial zone-by-zone windshield surveys to identify the type of debris and to estimate amounts of debris on the roadways and on private and public property. The results of the windshield surveys will be provided to DRC and to the DMC Liaison Officer located at the City DOC.

The DRC will establish initial priority for debris clearance based upon the following ranking as provided by the DAT:

- Extrication of people.

- Major flood drainage ways.
- Egress for fire, police, and Disaster Operations Center.
- Ingress to hospitals, jail, and special care unit.
- Major traffic routes.
- Supply distribution points and mutual aid assembly areas.
- Government facilities.
- Public Safety communications towers.
- American Red Cross shelters.
- Secondary roads to neighborhood collection points.
- Access for utility restoration.
- Neighborhood streets.
- Private property adversely affecting public welfare.

During the debris clearance and removal process, the DMC staff will be responsible for coordinating with the Electric Power Company Debris Coordinator and other utility companies (such as telephone and cable TV) as appropriate to ensure that power lines do not pose a hazard to emergency work crews.

## **B. Phase I – Initial Response**

For ease of control and coordination, debris management operations are divided into two phases.

Phase I will be implemented immediately after a debris-generating event to open emergency evacuation routes and roadways to critical facilities and affected neighborhoods. The major emphasis during this phase is to simply push debris from the traveled way to the rights-of-way or curb. This activity is commonly referred to as Debris Clearance. Little or no effort is made to remove debris from the rights-of-way.

Public Works will be responsible for implementing all Phase I activities with support as required from Parks and Recreation and Utilities. Requests for additional assistance will be submitted to the DRC located at the DMC.

Phase I activities include:

- Implementation of the Debris Management Plan.
- Determination of incident-specific debris management responsibilities.

- Establishment of priorities based on evacuation needs and prediction models.
- Identification and procurement of TDSR sites.
- Activation of pre-positioned contracts, if necessary to support Phase I clearance operations.
- Implementation of Public Information Plan.
- Coordination and tracking of resources.
- Formal documentation of costs.

### **C. Phase II - Recovery**

Phase II will be implemented within two to five days following a major debris-generating event, and will encompass the processes of debris removal and disposal. This delay is normal and allows time for affected citizens to return to their homes and begin the cleanup process. Debris must be brought to the rights-of-way or curb to be eligible for removal at public expense.

The City DM will be responsible for implementing all Phase II activities with support as required from Public Works, Parks and Recreation and Utilities. All debris removal and disposal operations will be coordinated by the DRC located at the DMC. Phase II may be quite lengthy as disaster recovery continues until pre-disaster conditions are restored.

Phase II activities include:

- Activation of pre-positioned contracts.
- Notification to citizens of debris removal procedures.
- Activation of TDSR sites.
- Removal of debris from rights-of-way and critical public facilities.
- Movement of debris from TDSR sites to permanent landfills.

### **D. Phase II Debris Removal and Disposal Overview**

The general concept of debris removal operations includes multiple, scheduled passes by each critical site, location, or rights-of-way. This manner of scheduling debris removal allows residents to return to their properties and bring debris to the edge of the rights-of-way as property restoration proceeds.

The City has been divided into 5 Debris Control Zones to control and expedite debris-removal and disposal operations (refer to Appendix B for zone delineation). The estimated quantity of debris that would be generated by a Category 2 Hurricane for the entire city is shown below in Table 1.

**Table 1 - City Debris Estimates**

<b>JURISDICITON</b>	<b>CAT 2 DEBRIS ESTIMATES (CUBIC YARDS)</b>	<b>TDSR SITE REQUIREMENTS (ACRES)</b>
City of Fairfax	67,220 CY	4 Minimum / 7 Maximum

Note: Estimated debris based on damage to 50% of structures.

Required acres represent the worst case and assume open space. Multiple small or large sites maybe used in this situation.

### **E. Phase II Debris Removal and Disposal Operations**

The DRC and DMC staff will coordinate debris removal and disposal operations for all portions of the City. Phase II operations involve the removal and disposal of curbside debris by City force account and/or contractor crews. All City-hired debris removal and disposal contractor operations will be overseen by the Debris Contractor Oversight Team (DCOT).

Under this plan, mixed debris will be collected and hauled from assigned Debris Control Zones to City-designated TDSR sites or to designated landfill locations. Clean woody debris will be hauled to the nearest designated vegetative TDSR site for eventual grinding. A listing of TDSR sites can be found in Appendix E.

The primary tracking mechanism for all debris loaded, hauled, and disposed of under this plan will be the Load Ticket, which is shown in Figure 2 below. Load tickets will be initiated at pickup sites and closed-out upon drop-off of each load at a TDSR site or permanent landfill, and are to be used to document both City force account and contracted haulers. Load tickets will serve as supporting documentation for contractor payment as well as for requests for FEMA reimbursement, in the event of a Federal disaster declaration.

<b>CITY OF FAIRFAX LOAD TICKET</b>		<b>Ticket No.</b> 000001
<b>Section 1</b>		
<b>Prime Contractor:</b>		<b>Date:</b>
<b>Subcontractor (Hauler):</b>		<b>Departure Time:</b>
<b>Driver:</b>		<b>Truck Plate No.:</b>
<b>Measured Bed Capacity (cu. yds.):</b>		
<b>Debris Pickup Site Location:</b> (must be a street address)		
<b>Debris Type:</b> <input type="checkbox"/> <b>Vegetation</b> <input type="checkbox"/> <b>Construction &amp; Demolition</b> <input type="checkbox"/> <b>Mixed</b> <input type="checkbox"/> <b>Other:</b>		
<b>Loading Site Monitor: Print Name:</b>		
<b>Signature:</b>		
<b>Remarks:</b>		
<b>Section 2</b>		
<b>Debris Disposal Site Location:</b>		
<b>Estimate Debris Quantity: cu. yds.</b> _____		<b>Arrival Time:</b>
<b>Disposal Site Monitor: Print</b>		<b>Name:</b>
_____		
<b>Signature:</b>		
<b>Remarks:</b>		
Copies: White – Load Site Monitor                      Green – Disposal Site Monitor Canary, Pink, Gold – Onsite Contractor's Representative or Driver		

**Figure 2 - Sample Load Ticket**

For tracking of all debris moved in response to a given event, the following is the disposition of each ticket part:

- Part 1        (White) Load Site Monitor (Turned in daily to the DMC)
- Part 2        (Green) Disposal Site Monitor (Turned in daily to the DMC)
- Part 3        (Canary) Driver or Contractor's on-site representative (Contractor Copy)
- Part 4        (Pink) Driver or Contractor's on-site representative (Contractor Copy)
- Part 5        (Gold) Driver or Contractor's on-site representative (Driver/Subcontractor Copy)

### **1. Debris Contractor Oversight Team**

The Debris Contractor Oversight Team (DCOT) is responsible for the coordination, oversight, and monitoring of all debris removal and disposal operations performed by

private contractors (see Appendix F, Debris Contract Oversight Team Standard Operating Guidelines).

The DCOT supervisor and team members will be detailed from Public Works, as well as from other City departments as required. The DCOT team may also be supplemented with contracted inspectors and other personnel as needed.

The DCOT team supervisor will be located at the DMC and will provide overall supervision of the three monitoring elements described below. Specific responsibilities include the following:

- Planning and conducting TDSR site inspections, quality control, and other Contractor oversight functions.
- Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor (see description below).
- Making recommendations to the DRC regarding distribution of City force account and Contractor work assignments and priorities.
- Reporting on progress and preparation of status briefings.
- Providing input to the City PIO on debris cleanup activities and pickup schedules.

The DCOT Supervisor will oversee the activities of three types of field monitors. The functions and responsibilities of the field monitors are described below (see also Appendix G, Debris Removal and Disposal Monitoring Plan).

a. Roving Monitors

Two-person teams of Roving Monitors will be assigned to specific Debris Control Zones or to a specific Contractor depending upon the distribution of work assignments. The Roving Monitors' mission is to act as the "eyes and ears" for the DRC and DCOT Supervisor to ensure that all contract requirements, including safety, are properly implemented and enforced.

Staff to fulfill the Roving Monitor positions will be provided by Public Works, a contractor, or from local government personnel. Roving Monitors will have the authority to monitor City contractor operations and to report any problems back to the DCOT Supervisor. Roving Monitors may request contract compliance, but do not have the authority to otherwise direct contractor operations or to modify the contract scope of work.

Roving Monitors will monitor debris operations on a full-time basis and make unannounced visits to all loading and disposal sites within their assigned debris management zone(s). In addition, Roving Monitors shall do the following:

- Assist in the measuring of all Contractor trucks and trailer with the contractor's representative. Take photographs of all trucks and trailers.

- Obtain and become familiar with all debris removal and disposal contracts for which they are providing oversight.
- Observe all phases of debris management operation, to include loading sites and TDSR sites.
- Prepare a daily written report of all contractor activities observed to include photographs.
- Periodically monitor each TDSR site to ensure that operations are being followed as specified in the applicable Debris Removal and Disposal Contract with respect to local and Federal regulations and the Debris Removal and Disposal Monitoring Plan (Appendix G).

Roving Monitors will also submit daily written reports to the DCOT supervisor outlining their observations with respect to the following:

- Is the contractor using the site properly with respect to layout and environmental considerations?
- Has the contractor established environmental controls in equipment staging areas, fueling, and equipment repair areas to prevent and mitigate spills of petroleum products and hydraulic fluids?
- Are plastic liners in place under stationary equipment such as generators and mobile lighting plants?
- Has the contractor established appropriate rodent control measures?
- Has the contractor established procedures to mitigate dust, noise, and traffic flow?

Roving Monitors' reports will also include written observations at loading sites, disposal sites, and the locations of any illegal dumping sites. If the monitor sees a problem they are to notify the DMC immediately and take photographs of the site.

b. Load Site Monitors

Load Site Monitors will be stationed at designated Contractor debris loading sites. The Load Site Monitors' primary function is to verify that debris being picked up is eligible under the terms of the contract.

Load Site Monitor positions will be staffed from Public Works or a contractor, and will be supplemented by other City department personnel depending on the magnitude of the debris-generating event. Load Site Monitors will be assigned to each contractor's debris loading site within designated Debris Control Zones, and will initiate and sign load tickets as verification that the debris being picked up is eligible.

c. Disposal Site Monitors

Disposal Site Monitors will be located at TDSR sites as identified by the DMC through out the recovery process. The Disposal Site Monitors' primary function is to ensure that accurate load quantities are being properly recorded on pre-printed load tickets. See Figure 2 above.

At each TDSR site and landfill disposal site, the contractor will be required to construct and maintain a monitoring station tower for use by the Disposal Site Monitor. The contractor will construct the monitoring station towers of pressure treated wood with a floor elevation that affords the Disposal Site Monitor a complete view of the load bed of each piece of equipment being utilized to haul debris. The contractor will also provide each site with chairs, table, and portable sanitary facilities.

The Disposal Site Monitor will estimate the quantity (in cubic yards) of debris in each truck/trailer entering the contractor's selected temporary TDSR site and will record the estimated quantity on pre-numbered debris load tickets. The contractor will only be paid based on the number of cubic yards of material deposited at the disposal site as recorded on debris load tickets. This is to be completed for all types of debris removal contracts and force account vehicles.

Disposal Site Monitors will be staffed by Public Works personnel, or a contractor, depending on the magnitude of the debris-generating event. The Disposal Site Monitors will be stationed at all TDSR sites for the purpose of verifying the quantity of material being hauled by the contractor. The Disposal Site Monitor will be responsible for closing out and signing each load ticket and returning a copy to the DCOT Supervisor at the end of each day.

**2. Franchise Garbage Contractors**

Currently, the city provides their own refuse collection. If at any time a debris-generating event occurs and any franchised garbage contractors are in use by the city, the contractors will continue to pickup refuse in accordance with current procedures, routes, and removal schedules. They will not haul disaster debris unless expressly authorized by the DRC.

**3. Household Hazardous Waste Drop-Off Locations.**

The County of Fairfax Household Hazardous Waste Collection Facility at 4618 West Ox Road, Fairfax, VA, phone 703-631-0495 will be the Household Hazardous Waste (HHW) drop-off location for the city. Residents will be required to separate and transport HHW to the pre-identified drop-off point. Tom Owens, Fire Chief, phone 703-385-7874 will coordinate with County officials and local Environmental Protection Agency (USEPA) officials for the collection of eligible industrial or commercial hazardous waste resulting from the disaster.

#### **4. Utility Company Property**

Dominion Virginia Power Company and other utility crews will remove and dispose of all utility related debris such as, power transformers, utility poles, cable, and other utility company material.

#### **5. Equipment Assets**

A table summarizing the equipment that details the equipment that Public Works, Parks and Recreation, and Utilities currently has in inventory that could be used to assist with debris removal is included in Appendix I.

#### **6. Contractor Debris Removal and Disposal Operations**

The City recognizes that disasters may generate debris of types and quantities that exceed the City's capabilities. Thus, the City will implement a pre-positioned contracting process to have contractors on stand-by to respond within a pre-determined time period to assist in requested aspects of the debris operation.(Appendix F, Approved Contractor List)

The City DM or his or her authorized representative will contact the firm(s) holding pre-positioned debris removal and disposal contract(s) and advise them of impending conditions. The scope of the pre-positioned contract provides for the removal and lawful disposal of all natural disaster-generated debris, excepting household, industrial, or commercial hazardous waste. Debris removal will be limited to City-maintained streets, roads, and other public rights-of-way based on the extent of the disaster. Debris removal will be limited to disaster related material placed at or immediately adjacent to the edge of the rights-of-way by residents within designated Debris Control Zones.

Each contractor, upon receipt of notice to proceed, will mobilize such personnel and equipment as necessary to conduct the debris removal and disposal operations detailed in the contractor's General Operations Plan (required by the Debris Removal and Disposal Contract). All contractor operations will be subject to review by the City DM and DRC.

The contractor will make multiple, scheduled passes of each site, location, or area impacted by the disaster according to assigned Debris Control Zones and as directed by the DRC. Schedules will be provided to the City PIO for publication and notification to the news media.

The load ticket, coupled with inspections by Roving, Load Site, and Disposal Site Monitors, will be the primary mechanism for monitoring contractor performance and tracking quantities for pay purposes.

Federal support will be requested if the incident is beyond the City's capability and its contractors. The USACE will be tasked by FEMA through the mission assignment process to provide the necessary support to the City.

The USACE will respond by providing trained and experienced Debris PRTs that are responsible for managing the debris mission from removal to final disposal. These tasks are accomplished utilizing pre-awarded contracts to private industry Contractors

experienced in debris removal operations. The USACE also has Debris Subject Matter Experts available to provide advice and support to the contractor and the DMC staff.

## **7. Temporary TDSR Sites**

The City recognizes the economic benefits of debris volume reduction, and will realize this benefit through the use of local TDSR sites for processing of clean woody debris. A listing of TDSR sites is located in Appendix E.

Contractors will operate the TDSR sites made available by the City. Each contractor will be responsible for all site setup, site operations, rodent control, closeout, and remediation costs at each of its sites. The contractor is also responsible for the lawful disposal of all by-products of debris reduction that may be generated.

The contractor will restore the TDSR sites as close to the original condition as is practical so that it does not impair future land uses. All sites are to be restored to the satisfaction of the DRC with the intent of maintaining the utility of each site.

Contractors are also expected to haul and manage construction and demolition (C&D) waste. C&D materials will be hauled to TDSR sites for temporary sorting and storage until final disposal arrangements are made.

It is important to note that all material deposited at TDSR sites will eventually be taken to a properly permitted landfill for final disposal. Under certain circumstances, the DRC may direct contractors to bypass C&D TDSR sites and approve the hauling of mixed C&D debris directly to a properly permitted landfill for disposal.

## **8. Load Ticket Disposition**

The Load Ticket will be a 5-part pre-printed form (see Figure 2 above).

At initiation of each load, the Load Site Monitor will fill out all items in Section 1 of the Load Ticket and will retain Part 1 (White Copy). The remaining copies will be given to the driver and carried with the load to the disposal site.

Upon arrival at the disposal site, the driver will give all four copies to the Disposal Site Monitor. The Disposal Site Monitor will complete Section 2 of the Load Ticket and retain Part 2 (Green). Parts 3, 4, and 5 will be given either to the Contractor's on-site representative or to the truck driver for subsequent distribution.

All trucks will be measured by the Contractor and DMC staff before the operation begins and periodically rechecked throughout the operation.

The contractor will be paid based on the number of cubic yards of eligible debris hauled per truckload. Payment for hauling debris will only be approved upon presentation of Part 4 (Pink) of the Load Ticket with the contractor's invoice.

Load tickets will also be completed and retained for City force account vehicles as a primary mechanism for tracking debris quantities deposited at TDSR sites.

## **9. Temporary TDSR Site Setup and Closeout Procedures**

The contractor will be responsible for preparing and closing out a TDSR site in accordance with specification in the Debris Removal and Disposal Contract and guidance contained in Appendix H.

## **10. Private Property Debris Disposal**

Dangerous structures are the responsibility of the owner to demolish in order to protect the health and safety of adjacent residents. However, experience has shown that unsafe structures will often remain in place due to lack of insurance or absentee landlords. Care must be exercised to ensure that the City properly identifies structures listed for demolition.

The City DM will coordinate with the County and State and FEMA Public Assistance Officers regarding:

- Demolition of private structures.
- Removing debris from private property.
- Local law and/or code enforcement requirement.
- Historic and archaeological site restrictions.
- Qualified environmental contractors to remove hazardous materials such as asbestos and lead-based paint.
- Execution of Right-of Entry/Hold Harmless agreements with landowners. A sample Right-of-Entry/Hold Harmless agreement is shown in Appendix F.

## ***V. WEAPONS OF MASS DESTRUCTION/TERRORISM EVENT***

The handling and disposal of debris generated from a Weapons of Mass Destruction (WMD) or terrorism event will exceed the capabilities of the City and will require immediate Federal assistance.

Normally, a WMD or terrorism event will, by its very nature, require all available assets and involve many more Federal and adjacent State and County departments and agencies. The nature of the waste stream as well as whether or not the debris is contaminated will dictate the necessary cleanup and disposal actions. Debris handling considerations that are unique to this type of event include:

- Much of the affected area will likely be a crime scene. Therefore, debris may be directed to a controlled TDSR site by State and/or Federal law enforcement officials for further analysis.
- The debris may be contaminated by chemical, biological, or radiological contaminants. If so, the debris will have to be stabilized, neutralized, containerized, etc. before disposal. In such

an occurrence, the operations may be under the supervision and direction of a Federal agency and one or more specialty Contractors retained by that agency.

- The presence of contamination will influence the need for pretreatment (decontamination), packaging and transportation.
- The type of contaminant will dictate the required capabilities of the personnel working with the debris. Certain contaminants may preclude deployment of resources that are not properly trained or equipped.

The City DM will continue to be the single point of contact for all debris removal and disposal issues within the City. Coordination will be exercised through the Emergency Support Function (ESF) #3 liaison located at the designated FEMA Joint Field Office.

In this type of event, the City will become a supporting element to the U.S. Army Corps of Engineers, and will operate as defined in the USACE WMD Emergency Response Plan (to be published).

## ***VI. ADMINISTRATION AND LOGISTICS***

All City departments and agencies will maintain records of personnel, equipment, load tickets, and material resources used to comply with this plan. Such documentation will then be used to support reimbursement from any Federal assistance that may be requested or required.

All City departments and agencies supporting debris operations will ensure 24-hour staffing capability during implementation of this plan, if the emergency or disaster requires or if directed by the City DM.

All City departments are responsible for the annual review of this plan in conjunction with the annual update to the City EOP. It will be the responsibility of each tasked department and agency to update its respective portion of the plan and ensure any limitations and shortfalls are identified and documented, and work-around procedures developed, if necessary.

The review will consider such items as:

- Changes in Mission
- Changes in Concept of Operations
- Changes in Organization
- Changes in Responsibility
- Changes in desired contracts
- Changes in pre-positioned contracts
- Changes in priorities

This plan also may be updated as necessary to ensure a coordinated response as other Debris Management Plans are developed. Surrounding cities may also develop Debris Management Plans that should be coordinated with the City's plan and other emergency plans. This coordination is especially important with respect to allocation of resources such as temporary staging areas and disposal facilities.

## **APPENDIX A**

### **ACRONYMS AND DEFINITIONS**

**LIST OF ACRONYMS**

AC	Acre
ACI	Advance Contracting Initiative (USACE)
C&D	Construction and Demolition
CY	Cubic Yard
DAC	Damage Assessment Coordinator
DAT	Damage Assessment Team
DCOT	Debris Contractor Oversight Team
DM	Debris Manager (or City Debris Manager)
DMC	Debris Management Center
DOC	Disaster Operations Center
DOT	Department of Transportation
DPW	Department of Public Works
DRC	Debris Removal Coordinator
EMA	Emergency Management Agency
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ERT-A	Emergency Response Team A
ES	Emergency Services
ESF	Emergency Support Function
FBI	Federal Bureau of Investigations
FEMA	Federal Emergency Management Agency
GSA	General Services Administration
HHW	Household Hazardous Waste
NRP	National Response Plan

P&R	Department of Parks and Recreation
PIO	Public Information Officer
PRT	Planning and Response Team
PW	Public Works Department
TDSR	Temporary Debris Staging and Reduction
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VDEM	Virginia Department of Emergency Management
WMD	Weapons of Mass Destruction

## DEFINITIONS

**Burning** – Reduction of woody debris by controlled burning. Woody debris can be reduced in volume by approximately 95% through burning. Air curtain burners are recommended because they can be operated in a manner to comply with clean-air standards.

**Chipping or Mulching** – Reducing wood related material by mechanical means into small pieces to be used as mulch or fuel. Woody debris can be reduced in volume by approximately 75%, based on data obtained during reduction operations. The terms “chipping” and “mulching” are often used interchangeably.

**Construction, Demolition and Land-Clearing Wastes** – Any type of solid waste resulting from land-clearing operations, the construction of new buildings or remodeling structures, or the demolition of any building or structure.

**Debris** - Scattered items and materials that were broken, destroyed, or displaced by a natural disaster. Examples: trees, construction and demolition material, personal property.

**Debris Clearance** – Clearing the major road arteries by pushing debris to the roadside to accommodate emergency traffic.

**Debris Removal** – Picking up debris and taking it to a temporary storage site or permanent landfill.

**Department of Public Works (DPW)** – Department typically responsible for clearing debris from the roads and rights-of-way.

**Department of Solid Waste** – Department typically responsible for managing and overseeing the collection and disposal of garbage, trash, construction debris, and disaster related debris.

**Department of Environmental Services** – Department typically responsible for managing and overseeing the collection of municipal solid waste, construction debris, recyclables, and disaster-related debris and also for operating local public landfills and composting sites.

**Final Debris Disposal** – Placing mixed debris and/or residue from volume reduction operations into an approved landfill.

**Force Account Labor** – In this context, State, tribal or local government employees engaged in debris removal activities within their own jurisdiction.

**Garbage** – Waste that is normally picked up by a designated department (such as the Department of Solid Waste Management, or a Contractor). Examples: food, plastics, wrapping, papers.

**Hazardous Waste** – Any waste or combination of wastes of a solid, liquid, contained gaseous or semisolid form which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

- Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Also includes material and products from institutional, commercial, recreational, industrial and agricultural sources that contain certain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive; and/or 4) Reactive. Such wastes may include, but are not limited to, those that are persistent in nature, assimilated, or concentrated in tissue or which generate pressure through decomposition, heat, or other means. The

term does not include solid or dissolved materials in domestic sewage or solid dissolved materials in irrigation return flows, or industrial discharges, which are point sources subject to state or federal permits.

**Household Hazardous Waste (HHW)** – Used or leftover contents of consumer products that contain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive and/or 4) Reactive. Examples of household hazardous waste include small quantities of normal household cleaning and maintenance products, latex and oil based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, and propane gas cylinders.

**Hot Spots** – Illegal dumpsites that may pose health and safety threats.

**Illegal Dumping** – Dumping garbage and rubbish, etc., on open lots is prohibited. No garbage, refuse, abandoned junk, solid waste or other offensive material shall be dumped, thrown onto, or allowed to remain on any lot or space within the District.

**Industrial Waste** – Any liquid, gaseous, solid, or other waste substance, or a combination thereof resulting from any process of industry, manufacturing, trade, or business or from the development of any natural resources.

**Monitoring** – Actions taken to ensure that a Contractor complies with the contract scope of work.

**Mutual Aid Agreement** – A written understanding between communities, states, or other government entities delineating the process of providing assistance during a disaster or emergency. (See FEMA Response and Recovery Directorate Policy Number 9523.6, “Mutual Aid Agreements for Public Assistance,” dated August 17, 1999.)

**National Response Plan** – A plan that describes the mechanism and structure by which the Federal government mobilizes resources and conducts activities to address the consequences of any major disaster or emergency that overwhelms the capabilities of State and local governments.

**Recycling** – The recovery and reuse of metals, soils, and construction materials that may have a residual monetary value: The City of Fairfax encourages the voluntary participation of all of its residents to reduce the waste stream through recycling. Residents are strongly encouraged to recycle all items that are recyclable and throw away for ultimate landfill disposal only those items, which cannot be recycled. Special containers are provided at numerous manned recycling and solid waste centers for the storage and collection of:

- Newspapers
- Green glass
- Brown glass
- Clear glass
- Aluminum and bi-metal beverage cans
- PET plastic milk jugs
- HDPE plastic drink bottles
- Used motor oil
- Lead acid batteries
- Scrap metals and appliances including refrigerators, stoves, water heaters, etc.
- Composts including leaves, limbs, brush, and yard wastes

**Rights-of-Way** – The portions of land over which facilities, such as highways, railroads, or power lines are built. Includes land on both sides of the highway up to the private property line.

**Scale/Weigh Station** – A scale used to weigh trucks as they enter and leave a landfill. The difference in weight determines the tonnage dumped and a tipping fee may be charged accordingly. Also may be used to determine the quantity of debris picked-up and hauled.

**Sweeps** – The number of times a Contractor passes through a community to collect all disaster-related debris from the rights-of-way. Usually limited to three passes through the community.

**Temporary Debris Staging and Reduction (TDSR) Site** – A location where debris is temporarily staged until it is sorted, processed, and reduced in volume and/or taken to a permanent landfill.

**Tipping Fee** – A fee based on weight or volume of debris dumped that is charged by landfills or other waste management facilities to cover their operating and maintenance costs. The fee also may include amounts to cover the cost of closing the current facility and/or opening a new facility.

**Trash** – Non-disaster related yard waste, white metals, or household furnishings placed on the curbside for pickup by local solid waste management personnel. Not synonymous with garbage.

**United States Army Corps of Engineers (USACE)** – The primary missions of the USACE are the design and management of construction projects for the Army and Air Force, and to oversee various flood control and navigation projects. The USACE may be tasked by FEMA to direct various aspects of debris operations when direct Federal assistance, issued through a mission assignment, is needed.

**Volume Reduction Operations** – Any of several processes used to reduce the volume of debris brought to a temporary debris storage and reduction site. It includes chipping and mulching of woody debris, shredding and baling of metals, air curtain burning, etc.

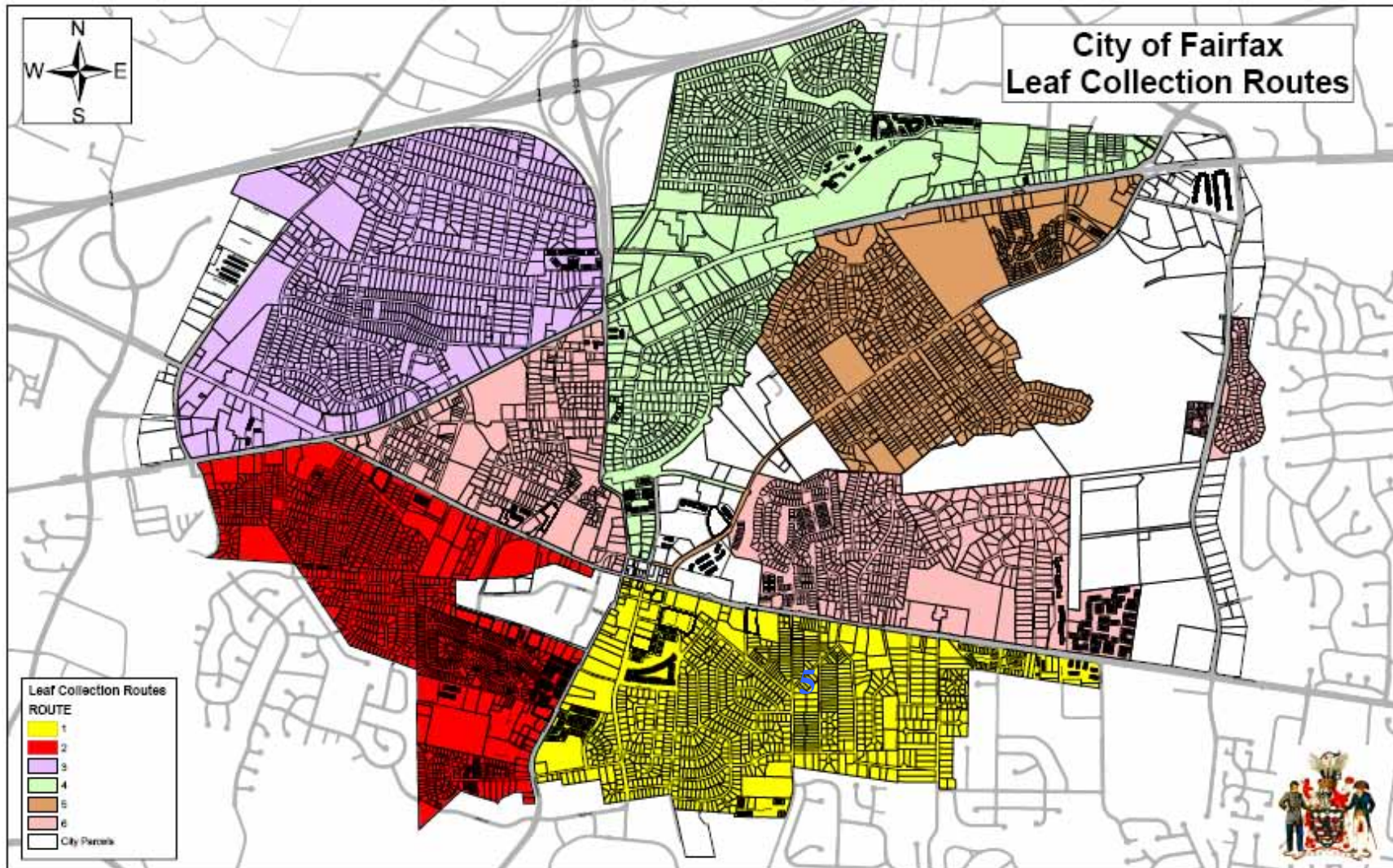
**White Metals** – Household appliances such as refrigerators, washers, dryers, and freezers.

## **APPENDIX B**

### **DEBRIS CONTROL ZONE INDEX MAP**



Debris Control Zone Map\*



*\*The City of Fairfax will use the Leaf Collection Zones as the Debris Control Zones.*



## **APPENDIX C**

### **CRITICAL FACILITIES**

In accordance with the Emergency Operations Plan Dated September 1999, the City Critical Facilities are as follows:

**Fire Stations**

Fire Station 403 – 4081 University Drive Fairfax, VA 22030 (Zone 1)

Fire Station 433- 10101 Fairfax Blvd Fairfax, VA 22030 (Zone 4)

**Police Stations**

Police Headquarters- 3730 Old Lee Highway Fairfax, VA 22030 (Zone 5)

**Emergency Operations Center**

3730 Old Lee Highway Fairfax VA, 22030 (Zone 5)

**Hospitals/Medical Facilities**

Inova Emergency Care center – 4215 Chain Bridge Road Fairfax, VA 22030 (Zone 1)

Fairfax Surgical center – 10730 Main Street Fairfax VA, 22030 (Zone 6)

**Staging Areas**

Thaiss Park – 3401 Pickett Road Fairfax VA, 22031 (Zone 6)

Kutner Park- 3901 Jermantown Road 22030 (Zone 3)

Draper Drive Park – 9858 Fairfax Blvd Fairfax VA, 22030 (Zone 4)



## APPENDIX D

### PRIMARY ROAD CLEARANCE LIST

In accordance with the Emergency Operations Plan Dated September 1999, the highest priority for debris removal will be to open emergency routes and exits and entrances to the City Critical Facilities such as but not limited to, fire stations, police stations, Emergency Operations Center, and hospitals/medical facilities.

#### Fire Stations

Fire Station 403 – 4081 University Drive Fairfax, VA 22030 (Zone 1)

Fire Station 433- 10101 Fairfax Blvd Fairfax, VA 22030 (Zone 4)

#### Police Stations

Police Headquarters- 3730 Old Lee Highway Fairfax, VA 22030 (Zone 5)

#### Emergency Operations Center

3730 Old Lee Highway Fairfax VA, 22030 (Zone 5)

#### Hospitals/Medical Facilities

Inova Emergency Care center – 4215 Chain Bridge Road Fairfax, VA 22030 (Zone 1)

Fairfax Surgical center – 10730 Main Street Fairfax VA, 22030 (Zone 6)

#### Staging Areas

Thaiss Park – 3401 Pickett Road Fairfax VA, 22031 (Zone 6)

Kutner Park- 3901 Jermantown Road 22030 (Zone 3)

Draper Drive Park – 9858 Fairfax Blvd Fairfax VA, 22030 (Zone 4)

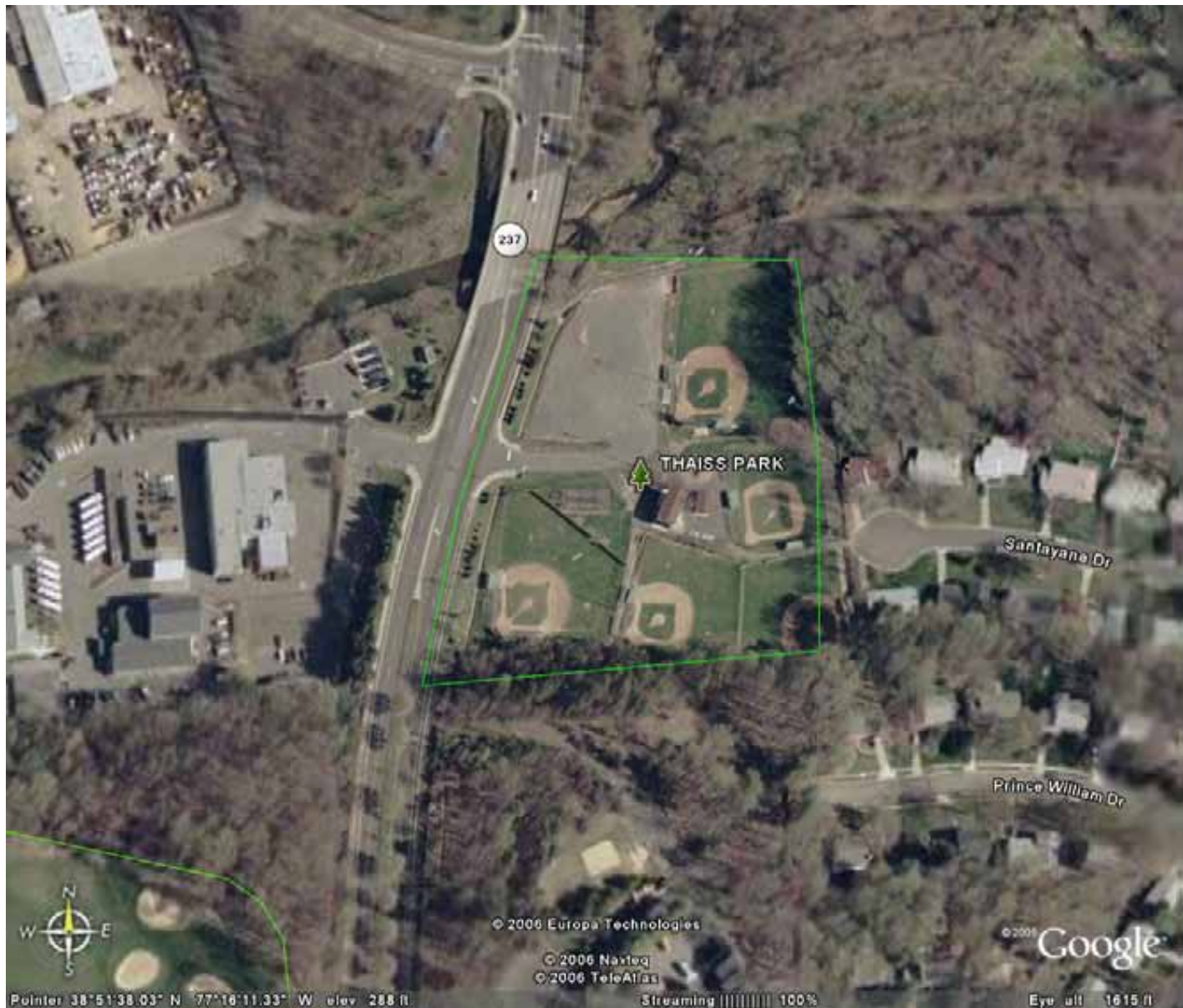


## **APPENDIX E**

### **TEMPORARY DEBRIS STAGING AND REDUCTION SITES**

**THIS PAGE INTENTIONALLY LEFT BLANK**

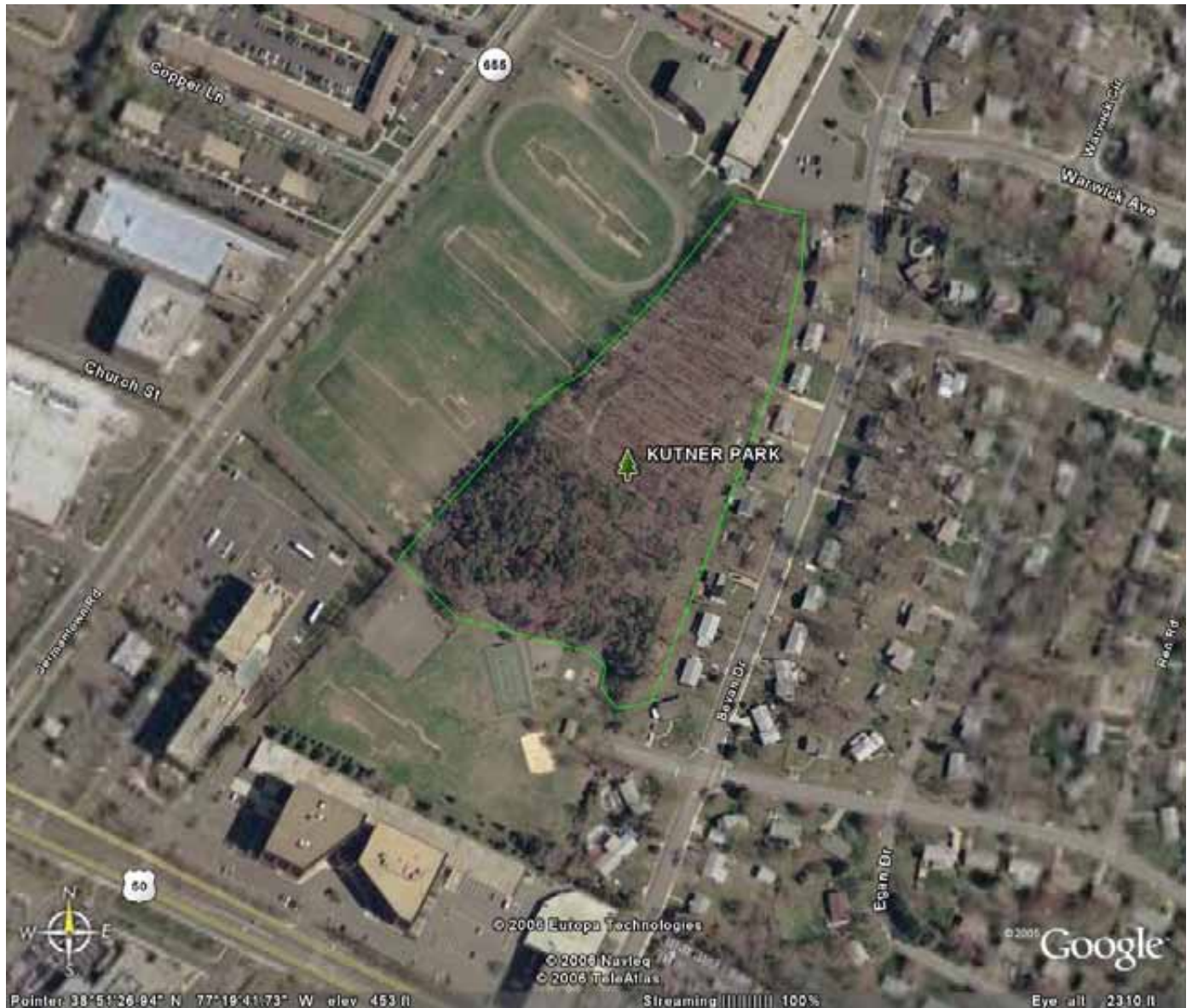
**Thaiss Memorial Park TDSR**



**Draper Drive Park TDSR**



Kutner Park TDSR



**COMMONWEALTH OF VIRGINIA**

**TEMPORARY DEBRIS STAGING AND REDUCTION SITE  
SELECTION AND OPERATING GUIDELINES**

## 1. SELECTING TEMPORARY DEBRIS STAGING AND REDUCTION SITES



### a. General.

All activities associated with large-scale debris removal and ultimate disposal operations depend upon the availability of suitable temporary debris staging and reduction (TDSR) sites. Identifying these potential sites before a major natural disaster will expedite debris removal actions. Local debris managers and staff should be involved with identifying and maintaining current listings of potential TDSR sites in areas prone to natural disasters. Pre-disaster site selection teams should include local officials who are familiar with the area and represent multiple professional disciplines, if possible, to help identify potential problems.

The preparation and operation of a TDSR site(s) are usually left to the debris disposal contractor. However, debris managers and staff should understand how a TDSR site is set up and operated. This information is extremely valuable in developing ultimate disposal plans, keeping local government officials and the public informed on debris removal and disposal operations, and ensuring compliance with environmental regulations. Section 1 of this document provides guidance on how to identify and select TDSR sites. See section 5 for a listing of reproducible forms. See section 6 for Debris Management Environmental Considerations.

### b. Responsibilities.

Pre-disaster site selection teams should:

- Include local officials who are familiar with the area.
- Be interdisciplinary to help identify potential problems.
- Investigate and evaluate potential sites before a major natural disaster.
- Develop and maintain current listings of potential debris storage sites in areas prone to natural disasters.

Consult and coordinate with:

- Local residents.
- Conservation agencies.
- Environmental groups and agencies.
- State Historical Preservation Office.

**c. Site Ownership.**

- Use public lands first to avoid costly leases.
- Use private lands only if public sites are unavailable.
- Have attorneys review leases to avoid extensive damage claims upon site closeout.

**d. Site Location.**

- Consider the locations with respect to noise, traffic, and the environment.
- When selecting public or private sites consider pre-existing conditions that may hinder or help the operation.
- Avoid environmentally sensitive areas such as:
  - Wetlands.
  - Rare and critical habitats of animal and plant species.
  - Well fields and surface water supplies.
- Historic/archaeological sites should be avoided as well.
- Develop procedures for temporary waivers.
- Look for sites with good ingress/egress to accommodate heavy truck traffic.
- Consider adjusting traffic signals to accommodate projected truck traffic on critical haul routes.

**e. Site Size.**

- Pre-designated sites should be on public property and consist of between 50 and 200 acres.
- The required size of the site will depend on:
  - Expected volume of debris to be collected.
  - Planned volume reduction methods.
- Identifying large sites mean fewer sites and easier site closeout.

**f. Site Neighbors.**

- Notify citizens early about the planned activities and possible ramifications from:
  - Dust and smoke from burning.
  - Around-the-clock light and noise from equipment operation.
  - Traffic.
- Avoid locating near:
  - Residential areas.
  - Schools.
  - Churches.
  - Hospitals.
  - Other sensitive areas.

**g. Existing Landfills**

- Identify locations of existing landfills.
- Determine their present debris capacity and logistical capabilities.
- Review any State-to-State or county-to-county landfill agreements.

**h. Recycling**

- Recycling success will depend on the types of debris and the local recycling environment.
- Identify recycling possibilities, such as:
  - Timber agreements.
  - Mulch and chip disposal in the agriculture community.
  - Fuel sources for incinerators or heating.

**i. Temporary Debris Staging and Reduction (TDSR) Site Investigation Form**

- The TDSR Site Investigation form in section 5 should be used to evaluate potential TDSR sites.

**2. TEMPORARY DEBRIS STAGING AND REDUCTION (TDSR) SITE SETUP AND OPERATIONS**

**a. TDSR Site Setup.**

Site topography and soil/substrate conditions should be evaluated to determine best site layout. When planning site preparation, think of ways to make restoration easier. For example, if the local soils are very thin, the topsoil can be scraped to bedrock and stockpiled in perimeter berms. Upon site closeout, the uncontaminated soil can be spread to preserve the integrity of the tillable soils.

Table 1 below is a TDSR baseline data checklist that should be used to evaluate a site before a contractor begins operations, and used during and after operations to ensure that site conditions are properly documented. See section 5 for a reproducible TDSR Site Baseline Data Checklist.

**a. b. TDSR Site Baseline Data Checklist**

<p><b>Before Activities Begin</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Take ground or aerial photographs and/ or video.</li> <li><input type="checkbox"/> Note important features, such as structures, fences, culverts, and landscaping.</li> <li><input type="checkbox"/> Take random soil samples*.</li> <li><input type="checkbox"/> Take random groundwater samples*.</li> <li><input type="checkbox"/> Take water samples from existing wells*.</li> <li><input type="checkbox"/> Check the site for volatile organic compounds.</li> </ul> <p>*Follow all local, State, and Federal requirements for environmental testing.</p> <p><b>After Activities Begin</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Establish groundwater-monitoring wells.</li> <li><input type="checkbox"/> Take groundwater samples.</li> <li><input type="checkbox"/> Take spot soil samples at household hazardous waste, ash, and fuel staging areas.</li> </ul> <p><b>Progressive Updates</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Update videos/photographs.</li> <li><input type="checkbox"/> Update maps/sketches of site layout.</li> <li><input type="checkbox"/> Update quality assurance reports, fuel spill reports, etc.</li> </ul> <p style="text-align: center;">TABLE 1</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**g. TDSR Site Operations**

Debris removal/disposal should be viewed as a multi-staged operation with continuous volume reduction. There should be no significant accumulation of debris at the TDSR sites. Instead, debris should be constantly flowing to air curtain burners, grinders, or recycled with the residue and mixed construction and demolition materials going to a landfill.

The contractor hired to operate a TDSR site must establish lined temporary staging areas for household hazardous waste (HHW), fuels, ash (if air curtain burning will be done on site), and other materials that may contaminate soils and groundwater. Plastic liners should be placed under stationary equipment such as generators and mobile lighting plants. These actions should be included as a requirement in the contract scope of work. If the site is also an equipment staging area, fueling and equipment repair should be monitored to prevent and mitigate spills of petroleum products and hydraulic fluids.

The contractor must establish a buffer zone to abate concerns over smoke, dust, noise, and traffic in neighboring areas. Traffic patterns must be designed to accommodate on-site operations as well as neighborhood traffic patterns. Materials should be segregate based on planned volume reduction methods. Operations that modify the site, such as substrate compaction and over excavation of soils when loading debris for final disposal, will adversely affect site restoration.



### **3. TEMPORARY DEBRIS STAGING AND REDUCTION (TDSR) SITE CLOSEOUT**

#### **a. TDSR Site Closeout Inspection**

Each TDSR site will eventually be emptied of all material and be restored to its previous condition and use. The contractor is required to remove and dispose of all mixed debris, construction and demolition debris, and debris residue to approved landfills. Appropriate local inspectors will monitor all closeout activities to ensure that the contractor complies with the Debris Removal and Disposal Contract. Additional measures may be necessary to meet county, state and federal environmental requirements due to the nature of the TDSR site operation.

#### **b. TDSR Site Closeout Planning**

The contractor must assure the Debris Manager that all TDSR sites are properly remediated. There will be significant costs associated with this operation as well as close scrutiny by the local press and environmental groups. Site remediation will go smoothly if baseline data collection and site operation procedures are followed.

#### **c. TDSR Site Closeout Steps**

1. The contractor is responsible for removing all debris from the site.
2. The contractor conducts an environmental assessment with Debris Manager and landowner (if site is leased).
3. The contractor should develop a remediation plan.
4. Remediation plan should be reviewed by the Debris Manager, landowner, and appropriate environmental agency.
5. The remediation plan should be approved by the appropriate environmental agency.
6. Contractor executes the plan.
7. The contractor obtains acceptance from the Debris Manager, appropriate environmental agency, and the landowner.

**d. TDSR Site Remediation**

During the debris removal process and after the material has been removed from each of the TDSR sites, environmental monitoring will be needed to close each of the sites. This is to ensure that no long-term environmental contamination is left on the site. The monitoring should be done on three different media: ash, soil, and groundwater.

- **Ash.** The monitoring of the ash should consist of chemical testing to determine the suitability of the material for either agricultural use or as a landfill cover material.
- **Soil.** Monitoring of the soils should be by portable inspection methods to determine if any of the soils are contaminated by volatile hydrocarbons. The contractors may do this if it is determined that hazardous material, such as oil or diesel fuel was spilled on the site. This phase of the monitoring should be done after the stockpiles are removed from the site.
- **Ground Water.** The monitoring of the groundwater should be done to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas.

**e. TDSR Site Closeout Coordination**

The contractor will coordinate the following closeout requirements through the Debris Management Center staff:

- Coordinate with local and state officials responsible for construction, real estate, contracting, project management, and legal counsel regarding requirements and support for implementation of a site remediation plan.
- Establish an independent testing and monitoring program. The contractor is responsible for environmental restoration of both public and leased sites. The contractor will also remove all debris from sites for final disposal at landfills prior to closure.
- Reference appropriate and applicable environmental regulations.
- Prioritize site closures.
- Schedule closeout activities.
- Determine separate protocols for ash, soil and water testing.
- Develop decision criteria for certifying satisfactory closure based on limited baseline information.
- Develop administrative procedures and contractual arrangements for closure phase.

- Inform local and State environmental agencies regarding acceptability of program and established requirements.
- Designate approving authority to review and evaluate contractor closure activities and progress.
- Retain staff during closure phase to develop site-specific remediation for sites, as needed, based on information obtained from the closure checklist shown in Table 2 below.

**f. TDSR Site Closure Checklist**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li><input type="checkbox"/> Site number and location.</li><li><input type="checkbox"/> Date closure complete.</li><li><input type="checkbox"/> Household hazardous waste removed.</li><li><input type="checkbox"/> Contractor equipment and temporary structures removed</li><li><input type="checkbox"/> Contractor petroleum spills remediated.</li><li><input type="checkbox"/> Ash piles removed.</li><li><input type="checkbox"/> Comparison of baseline information to conditions after the contractor has vacated the temporary site.</li><li><input type="checkbox"/> Appendices.<ul style="list-style-type: none"><li>• Closure documents.</li><li>• Contracting status reports.</li><li>• Contract.</li><li>• Testing results.</li><li>• Correspondence.</li><li>• Narrative responses.</li></ul></li></ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

TABLE 2

See Section 5 for a reproducible TDSR Site Closeout Checklist.



**g. TDSR Site Final Closeout**

Once a TDSR site is no longer needed, it should be closed in accordance with the following guidelines. Closeout or re-approval of a TDSR site should be accomplished within 30 days of receiving the last load of debris

Closeout is not considered complete until the following occurs:

- All processed and unprocessed vegetative material and inert debris shall be removed to a properly approved solid waste management site.
- Tires must be disposed of at a scrap tire collection/processing facility; white goods and other metal scrap should be separated for recycling.
- Burn residues shall be removed to a properly approved solid waste management site or land applied in accordance with these guidelines.
- All other materials, unrecoverable metals, insulation, wall board, plastics, roofing material, painted wood, and other material from demolished buildings that is not inert debris as well as inert debris that is mixed with such materials shall be removed to a properly permitted C & D recycling facility, C & D landfill, or municipal solid waste landfill.

#### **h. TDSR Site Re-approval**

Approved TDSR sites will require re-approval for long-term staging, continuing reduction processing, and permanent disposal if site is not closed out in accordance with guidelines stated above. TDSR sites shall be managed and monitored in accordance with local Health Department requirements and to prevent threats to the environment or public health.

### **4. EMERGENCY DEBRIS WASTEPILE PERMITTING CRITERIA**

#### **a. General**

This is an application for an emergency permit to dispose of waste generated as the result of natural or manmade disasters. The emergency permit request may be oral or written. If oral, it shall be followed within five days by a written emergency permit application. Oral responses can only be given if the applicant is fully aware of the site requirements outlined in this application, otherwise a written request must be provided using this application. Mail or fax the written request to the Department.

<p><i>Emergency Permits are valid for 90 days from the time they are issued. All associated waste activities must be inclusive in the 90-day period.</i></p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------

#### **b. Department of Environmental Quality (DEQ) Contact:**

Recommend that the following DEQ contact be consulted prior to submitting the following forms to obtain current requirements.

***DEQ Central Office***  
***629 East Main Street***  
***Richmond, VA 23240***  
***Attn: Mr. Paul Ferrel***  
***Phone: (804) 698-4214 or (804) 698-4000***

See Website for complete Land Management Permits Guidance:

<http://www.mde.state.md.us/Permits/WasteManagementPermits/index.asp#waste>

#### **c. Instructions**

Read all sections carefully. Fill in all of the information on DEQ Form EDWP-01 and all applicable information on DEQ Form EDWP-02. See Paragraph 5 for a reproducible copy of the

form. Public notice information required by the applicant is found on EDWP-03 and a certification signature is required on EDWP-04. See Paragraph 5 below for a reproducible copy of the forms. Note that a site map, flood map, US Fish and Wildlife Service National Wetlands Inventory Map and a list of wastes to be received, and the manner and location of their treatment, storage and disposal must accompany this application. The site may either be selected prior to the emergency or immediately after the emergency. The Department encourages pre-selection. Follow the applicable guidelines below.

**d. Pre-Selected Sites**

If the site is pre-selected, public participation must be held in accordance with the Virginia Solid Waste Management Regulations (**VSWMR**) **regulations 9 VAC 20-80-485.A.5 and 9 VAC 20-80-485.B.4**. The Department will not consider approval of a pre-selected site without public participation. Pre-selected sites, if approved, will be granted an emergency permit upon request at the time of the emergency.

The applicant needs only to contact the Department, either orally or in writing, and provide a notice that a pre-selected site will be used for the present emergency. The notice shall include, as a minimum, the applicants name and contact information, the nature of the emergency, and the location of the site and owners name. Oral requests shall be followed with a written request within five days. DEQ Form EDWP-01 and DEQ Form EDWP-02 must be on file with the Department prior to the emergency for all pre-selected sites. The public notice form is found on form EDWP-03. See Paragraph 5 below for a reproducible copy of the forms.

**e. Post Emergency Sites**

In the case of selecting a site immediately after an emergency, the Department may grant a temporary emergency permit through oral or written requests. The applicant may verbally relate the information requested on DEQ Form EDWP-01 and DEQ Form EDWP-02 but must provide written copies within five days or as soon as the infrastructure support will allow. See Paragraph 5 below for a reproducible copy of the forms. In addition, a public notice as per **9 VAC 20-80-485.B.4** shall be published, by the applicant, within five days of the request, or as soon as practicable, in order for the emergency permit to become effective. A copy of the advertisement shall be faxed to the Department once it is published. Disposal of waste may commence upon verbal approval but all waste activities must cease after 90 days.

**5. FORMS**

The following forms may be reproduced:

- Temporary Debris Staging and Reduction (TDSR) Site Investigation Form
- Temporary Debris Staging and Reduction (TDSR) Site Base Line Data Checklist
- Temporary Debris Staging and Reduction (TDSR) Site Closure Checklist
- DEQ FORM EDWP-01 - Emergency Debris Wastepile Permit Information
- DEQ FORM EDWP-02 - Emergency Debris Wastepile Siting Criteria
- DEQ FORM EDWP-03 - Public Notice for Emergency Permits
- DEQ FORM EDWP-04 - Certification
- DEQ FORM EDWP-05 - Attachment A thru Attachment D
- DEQ FORM EDWP-06 - Attachment D (Continued) thru Attachment F

# CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN

## TEMPORARY DEBRIS STAGING AND REDUCTION (TDSR) SITE INVESTIGATION FORM

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

SITE NAME: \_\_\_\_\_

SITE ADDRESS: \_\_\_\_\_

SITE COORDINATES: \_\_\_\_\_

SITE DESCRIPTION: \_\_\_\_\_

SITE RECOMMENDED FOR USE: YES \_\_\_\_\_ NO \_\_\_\_\_

CHARACTERISTIC	YES	NO	CHARACTERISTIC	GOOD	FAIR	POOR
Public Property			Surface Drainage			
In 100 Year Floodplain			Noise Acceptability			
>200 Acres			Smoke Acceptability			
>100 Acres			Suitable Ingress/Egress			
>50 Acres			Suitable in Wet Weather			
<50 Acres			Site Lends Itself to Easy Preparation			
			EXPLAIN "YES" RESPONSES			
Close to Schools, Hospitals, Residential, Churches						
Obvious Environmental Concerns						
Mostly Open/Clear						
Wetlands/Creeks/Ponds						
Developed						
Brownfield						
Paved Surfaces						
Already Fenced						
Adjacent to Airfield						
On-site Utilities						
Requires Access Roads/Internal Roads						
Capable of Handling Large No. of Vehicles						
Proximity to Major Roadway						

COMMENTS: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

VEGETATIVE COVER: NONE \_\_\_\_\_ LIGHT \_\_\_\_\_ MEDIUM \_\_\_\_\_ DENSE \_\_\_\_\_

CLOSEST LANDFILL AND APPROX. DISTANCE: \_\_\_\_\_

PROPOSED SITE OWNER: \_\_\_\_\_

OWNER'S PHONE NUMBER AND ADDRESS: \_\_\_\_\_

PHOTOGRAPHS WERE TAKEN: YES \_\_\_\_\_ NO \_\_\_\_\_

PHOTOGRAPH NUMBERS: \_\_\_\_\_

SKETCH ON BACK

**TEMPORARY DEBRIS STAGING AND REDUCTION SITE  
BASELINE DATA CHECKLIST**

The following site baseline data checklist should be used to evaluate a site before a contractor begins operations and used during and after to ensure that site conditions are properly documented

**Before Activities Begin**

- ☐ Take ground or aerial photographs and/ or video.
- ☐ Note important features, such as structures, fences, culverts, and landscaping.
- ☐ Take random soil samples.
- ☐ Take random groundwater samples.
- ☐ Take water samples from existing wells.
- ☐ Check the site for volatile organic compounds.

**After Activities Begin**

- ☐ Establish groundwater-monitoring wells.
- ☐ Take groundwater samples.
- ☐ Take spot soil samples at household hazardous waste, ash, and fuel Staging areas.

**Progressive Updates**

- ☐ Update videos/photographs.
- ☐ Update maps/sketches of site layout.
- ☐ Update quality assurance reports, fuel spill reports, etc.

**TEMPORARY DEBRIS STAGING AND REDUCTION SITE  
CLOSURE CHECKLIST**



The private sector debris removal contractors must assure the County Deputy Debris Manager that all TDSR sites are properly remediated. There will be significant costs associated with this operation as well as close scrutiny by the local press and environmental groups. Site remediation will go smoothly if baseline data collection and site operation procedures are followed.

- Contractor responsible for removing all debris from the site.
- Contractor conducts an environmental assessment with Debris Management Center staff and landowner.
- Contractor develops a remediation plan.
- Remediation plan reviewed by Debris Management Center staff, landowner, and appropriate environmental agency.
- Remediation plan approved by the appropriate environmental agency.
- Contractor executes the plan.
- Contractor obtains acceptance from County Deputy Debris Manager, appropriate environmental agency, and the landowner.

The following checklist should be used to document site closure activities

- ☐ Site number and location.
- ☐ Date closure complete.
- ☐ Household hazardous waste removed.
- ☐ Contractor equipment and temporary structures removed.
- ☐ Contractor petroleum spills remediated.
- ☐ Ash piles removed.
- ☐ Comparison of baseline information to conditions after the contractor has vacated the temporary site.

- Appendices.
  - Closure documents.
  - Contracting status reports.
  - Contract.
  - Testing results.
  - Correspondence.
  - Narrative responses.

---

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

---

**DEQ Contact Information**

Department of Environmental Quality  
*Regional Office Address*  
*Regional Office Address, ZIP*  
Attention: Solid Waste Permitting

Phone: (XXX) XXX-XXXX  
FAX: (804) 698-4383 .  
Please call prior to faxing to inform staff

**EMERGENCY DEBRIS WASTEPILE PERMIT INFORMATION**

If information is not known, use NA. Please type or print information. **Signature required under certification on form DEQ EDWP-04 when completed.**

Expected or current emergency	
Authority or Agency	
Primary Contact=s Name	
Address	
City, State, Zip	
Phone Number / Fax Number	
Secondary Contact=s Name	
Address	
City, State, Zip	
Phone Number / Fax Number	
Site Location (latitude/longitude or directions from major roads)	
Site Name	
City, State, Zip	
Owner of Site	
Owner=s Address	
City, State, Zip	
Phone Number / Fax Number	
Approximate size (acres)	
List expected types of waste See Attachment D for typical waste types. Additional sheets may be used	
Typical treatment, storage and disposal options Additional sheets may be used	

Revised 9/03

DEQ FORM EDWP-01

## CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN

### EMERGENCY DEBRIS WASTEPILE SITING CRITERIA

Put a T or X in the Yes / No Columns as necessary. Additional information is provided as attachments A-F. Please read each criterion carefully. **Sign the certification on DEQ FORM EDWP-04.**

	SITING CRITERIA	YES	NO
1	Site Location Map Attached		
2	Not prone to base floods [100 year flood plain, coastal flooding] or inundation. ➤ <i>Copy of FEMA Map or Equivalent is attached</i>		
3	Site is geologically stable. (see Attachment A)		
4	Site has adequate berm area and terrain to manage leachate release.		
5	Not closer than: ➤ 100 feet from any regularly flowing surface water body or river. ➤ 200 feet from any well, spring, or other groundwater source of drinking water		
6	WETLANDS SHALL NOT BE IMPACTED. (see Attachment B) ➤ <i>US Fish and Wildlife Service National Wetlands Inventory Map is attached.</i>		
7	Site characteristics: ➤ Slopes less than 33% ➤ No springs seeps or other groundwater intrusions ➤ No gas, water, sewage, or electrical or other transmission lines under the site ➤ No existing open dump, unpermitted landfill, lagoon, or similar facility on site. ➤ Specific site conditions which may be considered for exemption (applies only to site characteristics)  SPECIFY:		
8	No strip mines, exposed bedrock or quarries present. (See Attachment C) If No, does the site have a liner as per Attachment C?		
9	Fifty-foot firebreak around disposal areas and from all treelines		
10	Does not impact cemeteries (public, private, pet) or culturally sensitive areas.		
11	Has ample access for delivery vehicles.		
12	Is anticipated waste acceptable for disposal? (See Attachment D) <b>(90 day permit, all activities inclusive)</b>		
13	Can the waste be segregated for disposal? (See Attachment D)		
14	Public notice form with required information attached. (See Attachment F. Form should be faxed with other required forms. May be verbal over phone, if necessary.)		
15	For pre-selected sites, was a public meeting held? Public Meeting Location: Date: ____/____/____ (mm/dd/yyyy)		
16	Can the site be closed in accordance with Department standards? (See Attachment E)		

Revised 9/03

DEQ FORM EDWP-02

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

---

<b>Public Notice for Emergency Permits</b>	
Type of media (e.g. newspaper or radio)	
Name of media (e.g. newspaper)	
Contact Name	
Phone Number	
Fax Number	
Publication Cycle	

**NEWSPAPER ADVERTISEMENT**

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF WASTE PERMITTING  
PUBLIC NOTICE FOR A TEMPORARY EMERGENCY PERMIT  
TO TREAT AND STORE SOLID WASTE

DUE TO \_\_\_\_\_,  
(emergency)  
FOR \_\_\_\_\_, VA  
(city, town, county)

Due to the recent emergency from \_\_\_\_\_, and pursuant to the requirements of 9 VAC 20-80-485 .B.4 of the Virginia Solid Waste Management Regulations (VSWMR), Permitting of Solid Waste Management Facilities, The Virginia Department of Environmental Quality (*Regional Office Address & ZIP*), hereby authorizes \_\_\_\_\_ to operate a temporary emergency debris site located at \_\_\_\_\_.

The site will receive the following solid wastes:

\_\_\_\_\_

Typical treatment, storage, and disposal options will include:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The site meets the minimum siting requirements deemed necessary for environmental protection and public safety. Groundwater monitoring is not required but leachate management and run-off control are required. The permit will expire 90 days from the date of verbal or written authorization given on \_\_\_\_\_. Closure shall include the removal of wastes, waste constituents, and all temporary features used in support of the waste activities associated with deposit, environmental protection, maintenance, and operation. Final closure should return the site to as near as natural condition as possible prior to the disposal of waste. If there are any questions or concerns regarding the issuance of the temporary emergency permit, please contact the Department at (XXX) XXXXXXXX or at the above address.

Revised 9/03

DEQ FORM EDWP-03

---

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

---

**ALL APPLICATIONS MUST BE SIGNED**

**CERTIFICATION:**

I hereby affirm that the information provided on this application is accurate and complete to the best of my knowledge. I fully understand the requirements of the siting criteria and that an emergency permit is valid for 90 days from the time of issuance. All activities must be inclusive in the 90-day period. Failure to provide accurate and complete information or follow the requirements and conditions of this application may result in permit denial or revocation. I have enclosed a copy of the advertisement that was published in the local newspaper.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Type or Print dd/mm/yyyy)

Title or Authority by \_\_\_\_\_  
(Type or Print)

The following items must be returned to the Department:

- \_\_\_\_\_ Contact Information (EDWP-01)
- \_\_\_\_\_ Siting Checklist (EDWP-02)
- \_\_\_\_\_ Copy of Advertised Public Notice
- \_\_\_\_\_ Certification (EDWP-04)

## **ATTACHMENT A: GEOLOGY**

Emergency debris (ED) wastepiles shall not be sited in geologically unstable areas where inadequate foundation support for the structural components of the wastepile exists. Factors to be considered when determining unstable areas shall include:

- a. Soil conditions that may result in differential settling and subsequent failure of containment berms;

### **EXAMPLES**

highly compressible clays,	liquefiable soil	expansive soils	peat
collapsible soils	frost-susceptible soil	soils susceptible to hydrocompaction	
other conditions not explicitly listed			

- b. Geologic or geomorphologic features that may result in sudden or non-sudden events and subsequent failure of containment berms;

### **EXAMPLES**

Landslide prone areas	Abandoned river channels and lakes	highly erosion-prone areas	over sole source aquifer
other conditions not explicitly listed	highly karstic areas	groundwater seeps	
structural discontinuities such as extreme folding, faulting, fracturing and jointing			

- c. Man-made features or events (both surface and subsurface) that may result in sudden or non-sudden events and subsequent failure of containment berms;

### **EXAMPLES**

Emergency routes	unpermitted landfills	sludge lagoons	unsuitable fill
adjacent to highly explosive products such as chemical, petroleum or fertilizer storage bins			
downstream of weakened or damaged dams or other water retention structures			
over underground excavations such as storage tanks, sewer and traffic tunnels, mine shafts			
other conditions not explicitly listed			

- d. Presence of sink holes within the disposal area.

## **ATTACHMENT B: WETLANDS**

Wetlands shall be avoided at all times. Existing wetland delineation maps prepared by the US Fish and Wildlife Service shall be used to determine prohibited areas. *Attach an applicable Wetlands Inventory Map with this application.* Wetlands that are encountered on the site yet are not covered by the map shall not be used unless the U.S. Army Corps of Engineers provides an approval letter and it is attached to this application.

## **ATTACHMENT C: STRIP MINES, EXPOSED BEDROCK AND QUARRIES**

In strip mine pits, all coal seams and coal outcrops shall be isolated from solid waste materials by a minimum of five feet of natural or compacted soils with a hydraulic conductivity less  $1 \times 10^{-7}$  cm/sec. Exposed bedrock and quarry faces shall also be lined with five feet of natural or compacted soil with a hydraulic conductivity  $\leq 1 \times 10^{-7}$  cm/sec.

## **ATTACHMENT D: WASTE**

### **Acceptable Waste**

Demolition waste, construction waste, debris waste, land clearing debris, discarded tires, and white goods, free of chloroflourocarbons and PCBs. No other wastes are authorized for the ED wastepile. Liquid waste, sludge waste, radioactive waste, friable asbestos, medical waste and other similar waste shall be prohibited.

Hazardous waste shall be prohibited from the emergency wastepile except when a separate, distinct area can be lined with concrete, collection berms and ditches are erected, and containment booms, in conjunction with other containment strategies, are used.

#### Segregation

1. The limits of the wastepile shall be large enough to allow segregation of waste with 50-foot firebreak between each segregated area and any adjacent wastepiles or treelines.
- 2 Each segregated area shall be large enough to accommodate expected volume of waste type.
3. The following wastes require separate disposal areas within the limits of the emergency wastepile.
  - A. Yard Waste and Woody Products such as trees, stumps, untreated wood and timber, paper products, and untreated wooden household furnishings.
  - B. Treated and Painted Wood Products.
  - C. White Goods.
  - D. Tires.
  - E. Concrete, Asphalt and Building Material (friable asbestos is prohibited).
  - F. Hazardous Waste (if allowed).

#### **ATTACHMENT E: CLOSURE**

Closure shall include the removal of wastes, waste constituents and all temporary features used in support of the waste activities associated with deposit, environmental protection, maintenance and operation. Final closure should return the site to as near as natural condition as possible prior to the disposal of waste.

#### **ATTACHMENT F: PUBLIC NOTICE.**

VSWMR 9 VAC 20-80-485.B.4 requires a public notice to be accompanied with the written permit. The Applicant will fill out DEQ FORM EDWP-03 and fax that to a newspaper in the largest circulation for that municipality. The generic form contains the required information. The form is self-explanatory and may be filled in by hand. PRINT, do not use cursive. It must be legible. A copy of the advertisement from the newspaper must be submitted to the Department within 24 hours after submitting the contact information and siting checklist. Once the Department receives the required permit application and a copy of the advertisement from the applicant the permit will be signed and issued. The actual publication date of the advertisement should be the soonest date possible depending on the soonest newspaper publication date.

## **6. ACRONYMS**

ACM	Asbestos Containing Material
DEQ	Department of Environmental Quality
FEMA	Federal Emergency Management Agency
HHW	Household Hazardous Waste
TDSR	Temporary Debris Staging and Reduction
USACE	U.S. Army Corp of Engineers
UST	Underground Storage Tank
VSWMR	Virginia Solid Waste Management Regulations



**APPENDIX F**

**DEBRIS CONTRACT OVERSIGHT TEAM  
STANDARD OPERATING GUIDELINES**

## **DEBRIS CONTRACT OVERSIGHT TEAM STANDARD OPERATING GUIDELINES**

### **DEBRIS REMOVAL AND DISPOSAL OPERATIONS**

#### **General**

The City Debris Manager (DM) and Debris Management Center (DMC) staff will coordinate debris removal and disposal operations for all portions of the City. Phase II operations involve the removal and disposal of curbside debris by Public Works, Parks and Recreation, and Utilities. While City agencies will provide oversight of their own removal operations, contractor operations will be overseen by the Debris Contractor Oversight Team (DCOT).

Mixed debris will be collected and hauled from assigned Debris Control Zones to designated temporary TDSR sites or to designated landfill locations. Clean woody debris will be hauled to the nearest designated vegetative TDSR site for eventual burning or grinding.

Load tickets will be used to track all debris that is loaded, hauled, and disposed of. Load tickets are to be used by both in-house and contracted haulers and will serve as supporting documentation for contractor payment as well as for requests for federal assistance or reimbursement.

Franchise garbage contractors will continue to pickup refuse in accordance with current procedures, routes, and removal schedules. They will haul disaster debris as requested by the contracting authority.

### **DEBRIS CONTRACTOR OVERSIGHT TEAM**

#### **General**

The Debris Contractor Oversight Team (DCOT) is responsible for the coordination, oversight, and monitoring of all debris removal and disposal operations performed by City debris removal and disposal Contractors.

The DCOT supervisor and team members will be detailed from Public Works, or a contractor. The DCOT team may also be supplemented with contracted inspectors and other personnel as needed.

The DCOT team supervisor will be located at the Debris Management Center (DMC) and will provide overall supervision of the two field-based monitoring elements as described below. The DMC is located at the City of Fairfax Property Yard, 3410 Pickett Road, Fairfax, VA 22031. Specific DCOT Supervisor responsibilities include the following:

1. Planning, TDSR site inspection, quality control, and other contractor oversight functions.
2. Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor (see description below).
3. Making recommendations to the DRC regarding distribution of in-house and contractor work assignments and priorities.
4. Reporting on progress and preparation of status briefings.

5. Providing input to the City PIO on debris removal and disposal activities and pickup schedules.

The DCOT Supervisor will oversee the activities of two types of field-based inspection teams. The functions and responsibilities of the field inspectors are described in the following sections.

### **Roving Monitors**

Teams of Roving Monitors will be assigned to a specific Debris Control Zones or to a specific Contractor depending upon the distribution of work assignments. Their mission is to act as the “eyes and ears” for the Debris Manager and DCOT Supervisor to ensure that all contract requirements, including safety, are properly implemented and enforced.

Staff to fulfill the Roving Monitor positions will be provided by Public Works, or a contractor. Roving Monitors will have the authority to monitor contractor operations and to report back to the DCOT Supervisor. Roving Monitors may request contract compliance, but do not have the authority to otherwise direct Contractor operations or to modify the contract scope of work.

The following actions will be initiated immediately after a debris-generating disaster:

1. The Debris Manager will establish two-person roving monitor teams with their own transportation and communications.
2. Roving Monitor teams will be assigned to each contractor’s debris removal and disposal zone.

Once assigned, Roving Monitors will monitor debris operations on a full-time basis and make unannounced visits to all loading and disposal sites within their assigned debris management zone(s). In addition, Roving Monitors are responsible to do the following:

1. Obtain and become familiar with all debris removal and disposal contracts for which they are providing oversight.
2. Observe all phases of debris management operation, to include loading sites, TDSR sites.
3. Complete a Debris Loading Site Monitoring Checklist (Attachment 2) for every site visited.
4. Complete a Debris Disposal Site Monitoring Checklist (Attachment 3) for every TDSR site visited. Ensure that operations are being followed as specified in the applicable Debris Removal and Disposal Contract with respect to local, state, and federal regulations.
5. Complete the Stockpiled Debris Field Survey Form (Attachment 4) at least weekly at all temporary TDSR sites to determine estimated quantities of debris stockpiled.
6. Periodically measure curbside debris using the estimating formulas shown in Attachment 5.
7. Prepare a daily written report of all contractor activities observed to include photographs and the aforementioned checklists.

Roving Monitors will also submit daily written reports to the DCOT supervisor outlining their observations with respect to the following:

1. Is the contractor using the site properly with respect to layout and environmental considerations?

2. Has the contractor established environmental controls in equipment staging areas, fueling, and equipment repair areas to prevent and mitigate spills of petroleum products and hydraulic fluids?
3. Are plastic liners in place under stationary equipment such as generators and mobile lighting plants?
4. Has the contractor established appropriate rodent control measures?
5. Has the contractor established procedures to mitigate:
  - a. Dust – Are water trucks employed to keep the dust down?
  - b. Noise – Have berms or other noise abatement procedures been employed?
  - c. Traffic – Does the TDSR site have a suitable layout for ingress and egress to help traffic flow?

Roving Monitor's reports will also include observations at loading sites, disposal sites, and the locations of any illegal dumping sites.

### **Load Site Monitors**

Load Site Monitors will be stationed at designated contractor loading sites.

Load Site Monitor positions will be staffed from Public Works, or a contractor.

Load Site Monitors will be assigned to each contractor loading site within designated Debris Control Zones. The Load Site Monitors' primary function is to verify that debris being picked up is eligible under the terms of the contract. They will initiate and sign load tickets (see Figure 1 in main text) as verification that the debris being picked up is eligible.

The primary tracking mechanism for all debris loaded, hauled, and disposed of will be the Load Ticket. Load tickets will be initiated at pickup and closed-out upon drop-off of each load, and are to be used by both District and contracted haulers.

### **Disposal Site Monitors**

Disposal Site Monitors will be staffed by Public Works, or a contractor. The Disposal Site Monitors will be stationed at all temporary TDSR sites for the purpose of verifying the quantity of material being hauled by the contractor.

The Disposal Site Monitor will estimate the cubic yards of debris in each truck entering the temporary TDSR site and will record the estimated quantity on pre-numbered debris load tickets. The contractor will only be paid based on the number of cubic yards of material deposited at the disposal site as recorded on the debris load tickets.

The Disposal Site Monitor will be responsible for completing and signing each load ticket and returning DCOT copies to the DCOT Supervisor. In addition, Disposal Site Monitors will maintain a daily Debris Disposal Site Load Tracking Log (Attachment 6), which will also be returned to the DCOT at the end of each day.

At each temporary TDSR site and landfill disposal site, the contractor will be required to construct and maintain a monitoring station tower for use by the Disposal Site Monitor. The contractor will construct the monitoring station towers of pressure treated wood with a floor elevation that affords the Disposal Site Monitor a complete view of the load bed of each piece of equipment being utilized to haul debris. The contractor will also provide each site with chairs, table, and portable sanitary facilities.

### **Annual Training Workshop**

The DCOT Supervisor will be responsible for coordinating an annual training workshop for all assigned DCOT personnel. The purpose of the workshop is to review the Debris Management Plan procedures and to ensure that the DCOT operation works smoothly. Items of discussion will include:

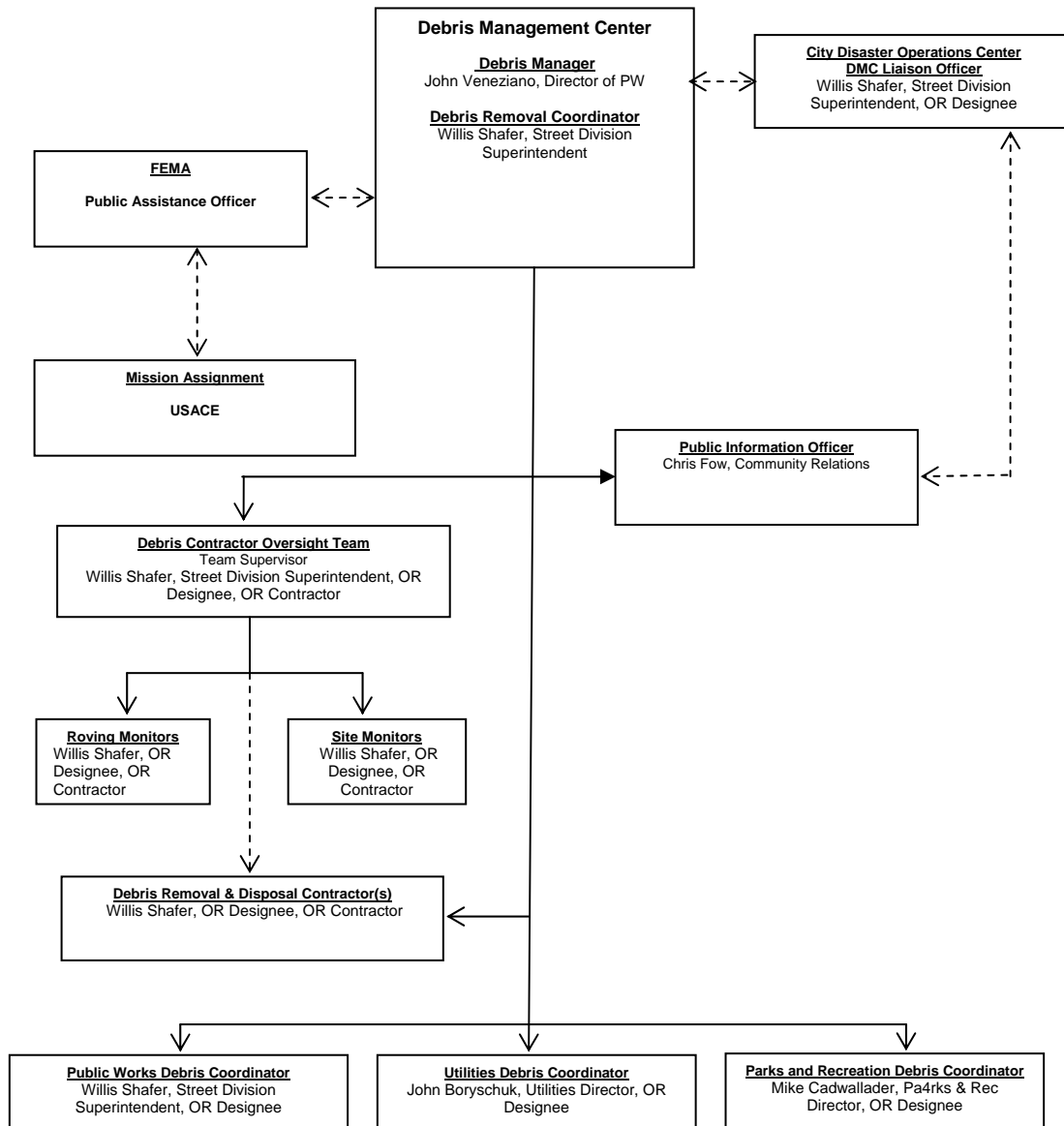
1. Contractor responsibility
2. Mobilization sites
3. Logistical support
4. Pre-storm mobilization
5. Procedures for call-up of Contractor personnel and equipment
6. Haul routing
7. Contractor vehicle identification and registration
8. Debris hauling load ticket administration
9. Mobilization and operation of the TDSR sites
10. Contractor payment request submission, review, and verification
11. Special procedures for Household Hazardous Waste
12. TDSR site closure requirements

This training will be scheduled annually in May, prior to the start of the Hurricane Season.

ATTACHMENT 1

City of Fairfax Debris Management Center Organization

Debris Contractor Oversight Team



**ATTACHMENT 2**

**Debris Loading Site Monitoring Checklist**

Date: \_\_\_\_\_  
Arrival Time: \_\_\_\_\_ Departure Time: \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
Loading Site Location: \_\_\_\_\_  
(Street address or nearest intersection)  
GPS Location: N \_\_\_\_\_; W \_\_\_\_\_  
Loading Site Monitor's Name \_\_\_\_\_  
(Print Name)  
Roving Monitor's Name: \_\_\_\_\_  
(Print Name)  
\_\_\_\_\_  
(Signature)

**Loading Site**

1. Is the Site Monitor filling out the Load Ticket properly? YES ☐ NO ☐  
If NO, explain actions taken:  
\_\_\_\_\_  
\_\_\_\_\_
2. Is the Contractor loading eligible debris from the designated right-of way (approximately 15' from curb)? YES ☐ NO ☐  
If NO, explain actions taken:  
\_\_\_\_\_  
\_\_\_\_\_
3. Is the Contractor loading trucks to capacity? YES ☐ NO ☐  
If NO, explain actions taken:  
\_\_\_\_\_  
\_\_\_\_\_
4. Identify Contractor's truck numbers observed while on site:  
\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_  
\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_
5. Were photographs taken at the loading site? YES ☐ NO ☐  
If YES, list photo log numbers: \_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_

General Notes and Comments: (Include observations within the general area as to overall cleanup activities)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(Use reverse side if necessary)

ATTACHMENT 3

Debris Disposal Site Monitoring Checklist

Date: \_\_\_\_\_  
Arrival Time: \_\_\_\_\_ Departure Time: \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
Disposal Site Location: \_\_\_\_\_  
(Street address or nearest intersection)  
GPS Location: N \_\_\_\_\_; W \_\_\_\_\_  
Disposal Site Monitor's Name \_\_\_\_\_  
(Print Name)  
Roving Monitor's Name: \_\_\_\_\_  
(Print Name)  
\_\_\_\_\_  
(Signature)

Disposal Site

1. Is the Disposal Monitor filling out the Load Ticket properly? YES ☐ NO ☐  
If NO, explain actions taken:  
\_\_\_\_\_  
\_\_\_\_\_
2. Is the Disposal Monitor attaching a copy of the Weight Ticket to the Load Ticket? YES ☐ NO ☐  
If NO, explain actions taken:  
\_\_\_\_\_  
\_\_\_\_\_
3. Are the Contractor's trucks loaded to capacity? YES ☐ NO ☐  
If NO, explain actions taken:  
\_\_\_\_\_  
\_\_\_\_\_
4. Identify Contractor's truck numbers observed while on site:  
\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_  
\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_
5. Were photographs taken at the loading site? YES ☐ NO ☐  
If YES, list photo log numbers: \_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_;\_\_\_\_\_

General Notes and Comments: (Include observations of operations at the landfill)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(Use reverse side if necessary)

ATTACHMENT 4

Stockpiled Debris Field Survey Form

**Stockpiled Debris Field Survey Form**

Type of Material:

Clean Vegetative\_\_\_ Mixed\_\_\_ C&D\_\_\_ Mulch\_\_\_ Other\_\_\_\_\_

Stockpile Location: \_\_\_\_\_ Date:\_\_\_\_\_

Average Length of Stockpile: \_\_\_\_\_ Feet

Average Width of Stockpile:\_\_\_\_\_ Feet

Average Height of Stockpile:\_\_\_\_\_ Feet

Total Cubic Feet : \_\_\_\_\_ Cubic Feet

Total Cubic Yards:(Cubic Feet divided by 27) \_\_\_\_\_ Cubic Yards

Contractor's Representative: \_\_\_\_\_ Date \_\_\_\_\_

Government's Representative: \_\_\_\_\_ Date\_\_\_\_\_

Remarks:\_\_\_\_\_

See Sketch of Site on Reverse Side

**Stockpiled Debris Field Survey Form**

Stockpile Location: \_\_\_\_\_

Width \_\_\_\_\_Feet

Height \_\_\_\_Feet

Length \_\_\_\_Feet

Height \_\_\_\_Feet

Length \_\_\_\_Feet

Remarks:\_\_\_\_\_

$\frac{L' \times W' \times H'}{27} = \text{CY}$

Height \_\_\_\_Feet

Width \_\_\_\_\_Feet

## ATTACHMENT 5

### Debris Estimating Formulas

#### Estimating Rule of Thumb:

- 15 trees, 8 inches in diameter = 40 CY
- Single wide mobile home = 290 CY
- Double wide mobile home = 415 CY
- Root system (8'-10' dia.) = One flat bed trailer to move
- Treat debris piles as a cube, not a cone, when performing estimates.
- Average pace = 2' 6"

#### Formulas

##### Conversions:

- 27 cubic feet=1 cubic yard
- One mile=5280 feet or 1760 yards

##### Building formula:

$L' \times W' \text{ (building footprint)} \times \text{No. of Stories} \times 0.2 = \text{Cubic Yards of debris}$

##### Debris pile formula:

$L' \times W' \times H' = \text{Cubic Yards of debris.}$

27

#### Conversion Factors from Cubic Yards to Tons

- Mixed Construction & Demolition Debris = 500 LBS/CY or  $CY \times 0.25 = \text{Tons}$
- Yard Vegetation = 300 LBS/CY or  $CY \times 0.15 = \text{Tons}$
- Mulch = 500 LBS/CY or  $CY \times 0.25 = \text{Tons}$
- Regular Trash = 300 LBS/CY or  $CY \times 0.15 = \text{Tons}$
- Concrete = 2000 LBS/CY or  $CY \times 1.0 = \text{Tons}$
- Sand = 2600 LBS/CY or  $CY \times 1.3 = \text{Tons}$
- Land Clearing (Root balls with dirt) 1500 LBS/CY or  $CY \times 0.75 = \text{Tons}$

ATTACHMENT 6

Debris Disposal Site Load Tracking Log

Debris Disposal Site Load Tracking Log							
Date		Supervisor's Name		Debris Contractor's Site Representative's Name			
Weather: am:		Weather: pm					
Location			Monitor's Name(s)				
Truck No.	Ticket No.	Ticket Owner	Estimated Quantity (CY)	Monitor's Initials	Load Accepted	Load Denied	Remarks

**Attachment 7**

**Approved Contractor List**

Phillips & Jordan Inc 191 P&J Road Robbinsville, NC 28771	Timothy R Barkhimer Director- Disaster Recovery Group Telephone: 828-479-3371 Mobile: 828735-0072 Fax 828.479.3010 Email: <a href="mailto:tberkhimer@pandj.com">tberkhimer@pandj.com</a>
480 South Andrews Ave Suite 103 Pompano Beach, Florida 33069	Terry Jackson Division Vice President Telephone: 954-535-3535 FAX: 954.545.3585 Email: Terry@ashbritt.com
Crowder Gulf Joint Venture, Inc 5535 Business Parkway Theodore, AL 38582	John Ramsey President Telephone: 800 992 6207 Email: <a href="mailto:jramsay@crowdergulf.com">jramsay@crowdergulf.com</a>

*(NOTE: Standardized City Procurement procedures will be adhered to on all Contracts)*

## **CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

---

**APPENDIX G**

**SAMPLE DEBRIS REMOVAL AND DISPOSAL MONITORING  
PLAN**

## DEBRIS REMOVAL AND DISPOSAL MONITORING PLAN SAMPLE

### GENERAL

The **Insert name of contracting agency and jurisdiction** has entered into a contract with **Insert name of Contractor** for the purposes of:

- Removing debris from city rights-of-way to temporary debris staging sites, and hauling vegetative and recyclable C&D and mixed debris to a debris volume reduction site.
- Setting up and operating **Insert appropriate number of TDSR sites** debris volume reduction site(s) located at **Insert address(es) of TDSR site(s)**.
- Hauling chips/mulch from the debris volume reduction site to **Insert name of landfill** Landfill or a location of the Debris Manager's choosing.
- Hauling recycled concrete, metal and other recycle C&D and mixed debris to **Insert name of approved C&D landfill** Landfill or a location of the Debris Manager's choosing or, if permitted under the terms of the contract, to a location of the Contractor's choosing for profit.

**Insert name of agency, department, or division responsible for monitoring Contractor activities** will be responsible for monitoring the Contractor's debris removal and disposal activities using **Insert appropriate agency, department, or division** personnel to prepare Debris Load Tickets and contract oversight.

### PURPOSE

The purpose of this plan is to outline the monitoring responsibilities of the **Insert jurisdiction name's** Contract Oversight Team personnel. This plan is subject to revision based on changing conditions.

### MONITORING OPERATIONS

**Insert jurisdiction name** has been divided into **Insert number of debris management zones** primary debris management zones **Add verbage here if debris zones are modeled after snow zones, etc.**. The Contractor will be responsible for removing all eligible vegetative, C&D and mixed debris from city street rights-of-way and hauling limbs, branches, and yard wastes to designated TDSR sites at **Insert locations of debris managment sites**.

Tree trunks greater than 2 feet in diameter and root balls will be hauled directly to the **Insert names of TDSR sites as appropriate** TDSR site.

Monitoring activities will be controlled by the Debris Manager from the DMC located at **Insert address of DMC**. Phone number for the Debris Manager is **Insert Debris Manager's phone number**. Day to day operations and contracting problems/questions should be directed to **Insert name, title and phone number of appropriate person**.

Debris Contract Oversight Team monitor's work day is expected to be from [ ] a.m. until [ ] p.m. with [ ] hour for lunch or maximum of [ ] hours/day [ ] days per week.

Monitors will be responsible for initiating Debris Load Tickets at Contractor debris loading sites and estimating and recording the type and quantity of debris, in cubic yards, of Contractor vehicles entering the temporary TDSR sites on Debris Load Tickets.

### **DEBRIS LOADING SITES MONITORS**

The debris loading site monitors will complete Section 1 of the load ticket. The monitor will keep one copy and give the remaining copies to the truck driver. The monitor's copy will be turned into the Debris Manager or designated representative on a daily basis. Load ticket information will be entered into a database by [ ] personnel.

Transportation will be provided by [ ] from [ ] and returning to [ ] or to/from a mutual meeting point.

### **TDSR SITE MONITORS**

The temporary TDSR site monitors will record the estimated quantity, in cubic yards, on Section 2 of the load ticket. The monitor will keep one copy and give the remaining copies to the truck driver. The monitor's copy will be turned into the Debris Manager or designated representative on a daily basis. Load ticket information will be entered into a database by [ ] personnel.

Monitors will be located at the entrance to the TDSR site where the inspection tower is located. They will be responsible for estimating and recording the cubic yards of debris in Section 2 of the Load Ticket for all incoming Contractor's debris hauling vehicles. A copy of the Debris Load Ticket is shown on the following page.

Transportation will be provided by [ ] from [ ] and returning to [ ] or to/from a mutual meeting point.

<b>CITY OF FAIRFAX LOAD TICKET</b>		<b>Ticket No.</b> 000001
<b>Section 1</b>		
<b>Prime Contractor:</b>		<b>Date:</b>
<b>Subcontractor (Hauler):</b>		<b>Departure Time:</b>
<b>Driver:</b>		<b>Truck Plate No.:</b>
<b>Measured Bed Capacity (cu. yds.):</b>		
<b>Debris Pickup Site Location:</b> (must be a street address)		
<b>Debris Type:</b> <input type="checkbox"/> <b>Vegetation</b> <input type="checkbox"/> <b>Construction &amp; Demolition</b> <input type="checkbox"/> <b>Mixed</b> <input type="checkbox"/> <b>Other:</b>		
<b>Loading Site Monitor: Print Name:</b>		
<b>Signature:</b>		
<b>Remarks:</b>		
<b>Section 2</b>		
<b>Debris Disposal Site Location:</b>		
<b>Estimate Debris Quantity: cu. yds.</b> _____		<b>Arrival Time:</b>
<b>Disposal Site Monitor: Print</b>		<b>Name:</b>
_____		
<b>Signature:</b>		
<b>Remarks:</b>		
Copies: White – Load Site Monitor                      Green – Disposal Site Monitor Canary, Pink, Gold – Onsite Contractor's Representative or Driver		

### COMPLETING THE LOAD TICKET

- The disposal site monitor will be stationed in the inspection tower and make an estimate of the quantity of debris contained in the truck or trailer in cubic yards. Each truck or trailer will have the measured hauling capacity in cubic yards recorded on the side of the truck or trailer. That number should be validated with the quantity stated in Section 1.
- The disposal site monitor will indicate the name and the arrival time of the truck and indicate the type of debris in the truck.
- The disposal site monitor will record the estimated volume, in cubic yards, on the load ticket in the Estimated Debris Quantity block of material contained within the bed of the truck or trailer.
- Examples of a Truck / Trailer Estimating Table and Truck Capacity Table are shown on the following page.

- The monitor will print and sign his/her name in the designated block. .
- The disposal site monitor will retain one copy of the load ticket and give the remaining copies to the truck driver. The disposal site monitor's copy will be turned into the District Debris Manager or his representative at the end of each day. These are controlled forms and cannot be lost since they will be used to verify the amount of money paid to the Debris reduction site Contractor and to the debris hauling Contractor.

#### EXAMPLE TRUCK / TRAILER ESTIMATING TABLE

Truck/Trailer Size - CY	100% CY	90% CY	85% CY	80% CY	75% CY
32	32	29	27	25	24
46	46	41	39	37	35
47	47	42	40	38	35
Note: Truck/Trailer without tailgate is rated at 85% of capacity					

#### EXAMPLE TRUCK CAPACITY TABLE

Truck Number	Driver	Model	License #	Capacity in CY
101	Joe Blow	Self Loader	39X2520 GA	32 CY
102	Kim Driver	Self Loader	39X2522 TX	32 CY
103	Steve Loader	Trailer	63XN362 MD	47 CY
104	David Dump	Self Loader	63X5542 LA	46 CY
105	Chip Grinder	Trailer	W5008 FL	47 CY

List Vehicle Numbers, Drivers Name, Model, License Number and Measured Capacity of Truck / Trailer Bed In Cubic Yards.

NOTE: Debris Contract Oversight Team members must measure and photograph every truck and trailer used by the contractor to move debris. This should be done jointly with the contractor's representative before debris removal operations begin.

#### MONITORING STAFF ASSIGNMENTS

Monitoring assignments and personnel names should be recorded in a table similar to the following:

#### EXAMPLE MONITORING STAFF TRACKING TABLE

Date	Monitor's Name	Monitor's Title	Disposal Site Name	Disposal Site Address	Hours Worked
10/1/03	Betty Rubble	Inspector	Mulching Park	123 Main St.	7 a.m. – 6 p.m.
10/1/03	Joe Blades	Tow Truck Operator	Redux Central	5000 South St.	7 a.m. – 7 p.m.

#### TRAINING

All assigned monitors will attend a  hour training session starting at  ☐ a.m. ☐ p.m. on  date  at  location. Alternate training date is  alternate date, same time and location.



**APPENDIX H**

**DEBRIS CLEARING, REMOVAL, & DISPOSAL GUIDELINES**

**Table of Contents**

Right of Entry / Hold Harmless Agreement ..... H-3

TDSR Site Setup and Closeout Guidelines ..... H-4

Temporary Construction and Demolition Staging / Transfer Site Guidelines ..... H-8

Temporary Vegetative TDSR Site Guidelines ..... H-11

Air Curtain Burner Site Location and Operations ..... H-13

Environmental Checklist for Air Curtain Pit Burners ..... H-16

Land Application of Wood Ash from Storm Debris Burn Sites Guidelines ..... H-17

Reducing the Potential for Spontaneous Combustion in Compost or Mulch Piles GuidelinesH-18

**Right of Entry / Hold Harmless Agreement**

*(Right of Entry / Hold Harmless Agreement is strictly a sample and must be reviewed by local legal staff before use)*

I/We **Insert Owners' Legal Names**, the owner(s) of the property commonly identified as **Insert Street Address**, City of Fairfax, County of Fairfax, State of Virginia, do hereby grant and give freely and without coercion, the right of access and entry to City of Fairfax, its agencies, contractors, and subcontractors, for the purpose of removing and clearing any or all storm-generated debris of whatever nature from the above described property.

It is fully understood that this permit is not an obligation to perform debris clearance. The undersigned agrees and warrants to hold harmless the City of Fairfax, State of Virginia, its agencies, contractors, and subcontractors, for damage of any type whatsoever either to the above described property or persons situated thereon and hereby release, discharge, and waive any action, either legal or equitable, that might arise out of any activities on the above described property. The property owner(s) will mark any storm damaged sewer lines, water lines, and other utility lines located on the described property.

I/We (☐have, ☐have not) (☐will, ☐will not) receive(d) any compensation for debris removal from any other source, including the Small Business Association (SBA), Agricultural Stabilization and Conservation Service (ASCS), private insurance, individual and family grant program or any other public assistance program. I will report for this property any insurance settlements to me or my family for debris removal that has been performed at government expense. For the considerations and purposes set forth herein, I set my hand this **Insert Numerical Day** day of **Insert Month**, 20**Insert last two digits of year**.

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Telephone Number and Address

**TDSR Site Setup and Closeout  
Guidelines**

---

---

***TDSR SITE SETUP***

The topography and soil/substrate conditions should be evaluated to determine best site layout. When planning site preparation, think of ways to make restoration easier. For example, if the local soils are very thin, the topsoil can be scraped to bedrock and stockpiled in perimeter berms. Upon site closeout, the uncontaminated soil can be spread to preserve the integrity of the tillable soils.

The following site baseline data checklist should be used to evaluate a site before a contractor begins operations and used during and after to ensure that site conditions are properly documented.

***TDSR SITE BASELINE DATA CHECKLIST***

**A. Before Activities Begin**

- ☐ Take ground or aerial photographs and/or video.
- ☐ Note important features, such as structures, fences, culverts, and landscaping.
- ☐ Take random soil samples.
- ☐ Take random groundwater samples.
- ☐ Take water samples from existing wells.
- ☐ Check the site for volatile organic compounds.

**B. After Activities Begin**

- ☐ Establish groundwater-monitoring wells.
- ☐ Take groundwater samples.
- ☐ Take spot soil samples at household hazardous waste, ash, and fuel storage areas.

**C. Progressive Updates**

- ☐ Update videos/photographs.
- ☐ Update maps/sketches of site layout.
- ☐ Update quality assurance reports, fuel spill reports, etc.

### ***TDSR SITE OPERATIONS***

Lined temporary storage areas should be established for ash, household hazardous waste, fuels, and other materials that may contaminate soils and groundwater. Plastic liners should be placed under stationary equipment such as generators and mobile lighting plants. These actions should be included as a requirement in the contract scope of work. If the site is also an equipment storage area, fueling and equipment repair should be monitored to prevent and mitigate spills of petroleum products and hydraulic fluids. Be aware of and lessen the effects of operations that might irritate occupants of neighboring areas. Establishment of a buffer zone can abate concerns over smoke, dust, noise, and traffic.

Consider on-site traffic patterns and segregate materials based on planned volume reduction methods. Operations that modify the landscape, such as substrate compaction and over excavation of soils when loading debris for final disposal, will adversely affect landscape restoration.

Debris removal/disposal should be viewed as a multi-staged operation with continuous volume reduction. There should be no significant accumulation of debris at temporary storage sites. Instead, debris should be constantly flowing to burners and grinders, or recycled with the residue and mixed construction and demolition materials going to a landfill.

### ***TDSR SITE CLOSEOUT***

Each TDSR site will eventually be emptied of all material and be restored to its previous condition and use. The Contractor is required to remove and dispose of all mixed debris, construction and demolition debris, and debris residue to approved landfills. Appropriate *Insert Jurisdiction* inspectors will monitor all closeout activities to ensure that the Contractor complies with the Debris Removal and Disposal Contract. Additional measures may be necessary to meet local, State, and Federal environmental requirements because of the nature of the TDSR site operation(s).

#### **A. TDSR Site Closeout Planning**

The Contractor must assure the Debris Manager that all TDSR sites are properly remediated. There will be significant costs associated with this operation as well as close scrutiny by the local press and environmental groups. Site remediation will go smoothly if baseline data collection and site operation procedures are followed. Closeout or re-approval of a temporary TDSR site should be accomplished within 30 days of receiving the last load of debris.

#### **B. TDSR Site Closeout Steps**

1. Contractor is responsible for removing all debris from the site.
2. Contractor conducts an environmental assessment with the Debris Manager and landowner.
3. Contractor develops a remediation plan.

4. Remediation plan reviewed by the Debris Manager, landowner, and appropriate environmental agency.
5. Remediation plan approved by the appropriate environmental agency.
6. Contractor executes the plan.
7. Contractor obtains acceptance from the Debris Manager, appropriate environmental agency, and the landowner.

### **C. TDSR Site Closeout Coordination**

The Contractor will coordinate the following closeout requirements through the DCOT staff:

- Coordinate with local and State officials responsible for construction, real estate, contracting, project management, and legal counsel regarding requirements and support for implementation of a site remediation plan.
- Establish an independent testing and monitoring program. The Contractor is responsible for environmental restoration of both public and leased sites. The Contractor will also remove all debris from sites for final disposal at landfills prior to closure.
- Refer to appropriate and applicable environmental regulations.
- Prioritize site closures.
- Schedule closeout activities.
- Determine separate protocols for ash, soil and water testing.
- Develop decision criteria for certifying satisfactory closure based on limited baseline information.
- Develop administrative procedures and contractual arrangements for closure phase.
- Inform local and State environmental agencies regarding acceptability of program and established requirements.
- Designate approving authority to review and evaluate Contractor closure activities and progress.
- Retain staff during closure phase to develop site-specific remediation for sites, as needed, based on information obtained from the closure checklist shown below.

### **D. Material Removal**

1. All processed and unprocessed vegetative material and inter debris shall be removed to a properly approved solid waste management site.
2. Tires must be disposed of at a scrap tire collection/processing facility; white goods and other scrap metal should be separated for recycling.
3. Burn residues shall be removed to a properly approved solid waste management site or land applied in accordance with these guidelines.
4. All other materials, unrecoverable metals, insulation, wallboard, plastics, roofing material, painted wood, and other material from demolished buildings that is not inert debris (see #1 above) as well as inter debris that is mixed with such materials shall be removed to a properly permitted C&D recycling facility, C&D landfill, or municipal solid waste landfill.

### **E. TDSR Site Remediation**

During the debris removal process and after the material has been removed from each of the TDSR sites, environmental monitoring will be needed to close each of the sites. This is to ensure that no long-term environmental contamination is left on the site. The monitoring should be done on three different media: ash, soil, and groundwater.

**Ash.** The monitoring of the ash should consist of chemical testing to determine the suitability of the material for either agricultural use or as a landfill cover material.

**Soil.** Monitoring of the soils should be by portable inspection methods to determine if any of the soils are contaminated by volatile hydrocarbons. The Contractors may do this if it is determined that hazardous material, such as oil or diesel fuel was spilled on the site. This phase of the monitoring should be done after the stockpiles are removed from the site.

**Ground Water.** The monitoring of the groundwater should be done to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas.

### **F. TDSR Site Closure Checklist**

- ☐ Site number and location
- ☐ Date closure complete
- ☐ Household hazardous waste removed
- ☐ Contractor equipment and temporary structures removed
- ☐ Contractor petroleum spills remediated
- ☐ Ash piles removed
- ☐ Comparison of baseline information to conditions after the contractor has vacated the temporary site

### **G. Site Re-approval**

Sites that were approved as temporary TDSR sites will require re-approval for long-term storage, continuing reduction processing, and permanent disposal if site is not closed out in accordance with guidelines stated here. Sites shall be managed and monitored in accordance with the Health Department requirements and to prevent threats to the environment or public health.

**Temporary Construction and Demolition Staging / Transfer Site  
Guidelines**

---

***GENERAL***

The following guidelines should be considered when establishing staging/transfer sites for Construction & Demolition (C&D) and C&D recycling treatment and processing facilities.

These guidelines apply only to sites for staging/transferring C&D storm debris (roof shingles/roofing materials, carpet, insulation, wallboard, treated and painted lumber, etc.). Arrangements should be made to screen out unsuitable materials, such as household garbage, white goods, asbestos containing materials (ACM's), and household hazardous waste.

***SELECTING TEMPORARY STAGING / TRANSFERRING SITES***

Locating sites for staging/transferring C&D waste can be accomplished by evaluating potential sites and by revisiting sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site. The following guidelines are presented in locating a site for "staging/transferring" and are considered "minimum standards" for selecting a site for use:

- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
- Unloading areas for incoming C&D debris material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings, structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
- Materials separated from incoming C&D debris (white goods, scrap metal, etc.) shall be at least 50 feet from site property lines. Other non-transferable C&D wastes (household garbage, larger containers of liquid, household hazardous waste shall be placed in containers and transported to the appropriate facilities as soon as possible.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.

- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
- Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
- Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks.
- When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of after hours emergency.
- Final written approval is required to consider any TDSR site to be closed. Closeout of processing/recycling sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the State may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closeout of sites shall be in accordance with the closeout and restoration of temporary TDSR sites guidelines.

### ***C&D TREATMENT & PROCESSING/RECYCLING SITES***

Management of C&D debris and source separated materials to be recycled shall be in accordance with the following additional conditions:

- Contact the City Health Department for information on managing asbestos containing materials (ACM's) or materials that are considered regulated asbestos containing materials.
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
- Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site verification by the local Corps of Engineers office or will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings, structures, and septic tanks with leach fields or at least 250 feet

from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.

- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks / trailers used to haul debris and the intense heat generated by the air curtain burner (ACB) device. Underground utilities need to be identified prior to digging pits for using the ACB device.
- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also include information as to whether only commercial haulers or the general public may deposit waste.
- Final written approval is required to consider any TDSR site to be closed. Closeout of processing / recycling sites shall be within six months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the State may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.

### **Temporary Vegetative TDSR Site Guidelines**

---

#### ***GENERAL***

When preparing temporary facilities for handling debris resulting from the clean up efforts due to hurricane damage, the following guidelines should be considered when establishing Temporary TDSR sites.

These guidelines apply only to sites for staging or burning vegetative storm debris (yard waste, trees, limbs, stumps, branches, and untreated or unpainted wood). Arrangements should be made to screen out unsuitable materials.

The two method (s) of managing vegetative and land clearing storm debris is "chipping/grinding" for use in landscape mulch, compost preparation, and industrial boiler fuel or using an "air curtain burner (ACB)", with the resulting ash being land applied as a liming agent or incorporated into a finished compost product as needed.

#### ***CHIPPING AND GRINDING SITES***

Locating sites for chipping/grinding of vegetative and land clearing debris will require a detailed evaluation of potential sites and possible revisits at future dates to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site.

The following guidelines are presented in locating a site for "chipping/grinding" and are considered "minimum standards" for selecting a site for use:

- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
- Storage areas for incoming debris and processed material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris and processed material shall be at least 100 feet from the site property boundaries and on-site buildings/structures. Management of processed material shall be in accordance with the guidelines for reducing the potential for spontaneous combustion in compost/mulch piles.
- Storage areas for incoming debris shall be located at least 100 feet from residential dwellings, commercial or public structures, potable water supply wells, and septic tanks with leach fields.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
- Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
- Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks. Sites should have adequate access that prohibits traffic from backing onto public rights-of-way or blocking primary and/or secondary roads to the site.
- When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of an after hours emergency.
- Grinding of clean wood waste such as pallets and segregated non-painted/non-treated dimensional lumber is allowed.
- Final written approval is required to consider any TDSR site to be closed. Closeout of staging and processing sites shall be within six months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the

site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closeout of sites shall be in accordance with the closeout and restoration guidelines for temporary TDSR sites.

### **Air Curtain Burner Site Location and Operations**

---

Locating sites that are intended for air curtain burning (ACB) operations is a coordinated effort between **Insert Appropriate Local Authority** and **Insert Appropriate State Agency** for evaluating the surrounding areas and to reevaluate potential sites used in the past.

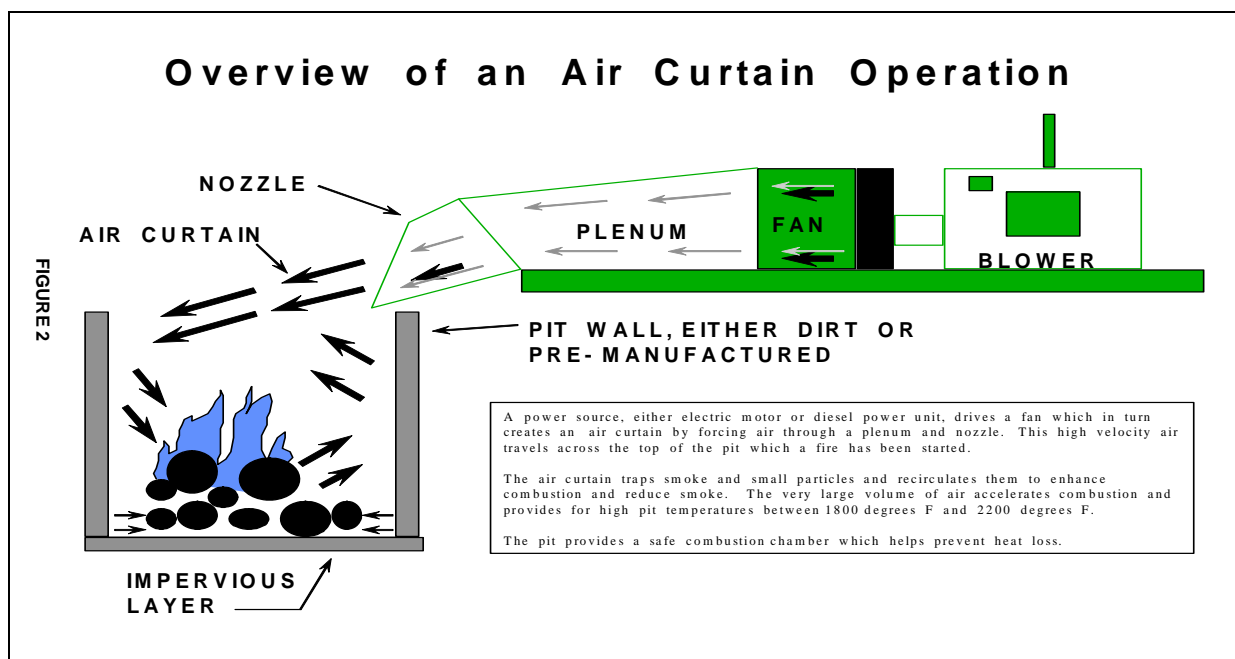
The following guidelines are presented for selecting an ACB site and operational requirements once a site is in use:

- Contact the local fire marshal or fire department for input into site selection in order to minimize the potential for fire hazards, other potential problems related to fire fighting that could be presented by the location of the site, and to ensure that adequate fire protection resources are available in the event of an emergency.
- The requirements for ACB device(s), in accordance with Air Quality rules require the following buffers: a minimum of 500 feet from the ACB device to homes, dwellings and other structures and 250 feet from roadways. Contact **Insert Appropriate Local and/or State Agency** for updates or changes to their requirements.
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected. If ACB pit devices are utilized, a minimum two-foot separation to the seasonal high water table is recommended. A larger buffer to the seasonal high water table may be necessary due to on-site soil conditions and topography.
- Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Air Curtain Burners in use should be located at least 200 feet from on-site storage areas for incoming debris, on-site dwellings and other structures, potable water supply wells, and septic tanks and leaching fields.
- Wood ash stored on-site shall be located at least 200 feet from storage areas for incoming debris, processed mulch or tub grinders (if a grinding site and ACB site is located on the same property). Wood ash shall be wetted prior to removal from the ACB device or earth pit and placed in storage. If the wood ash is to be stored prior to removal from the site, then rewetting may be necessary to minimize airborne emissions.
- Wood ash to be land applied on site or off site shall be managed in accordance with the guidelines for the land application of wood ash from storm debris burn sites. The ash shall be

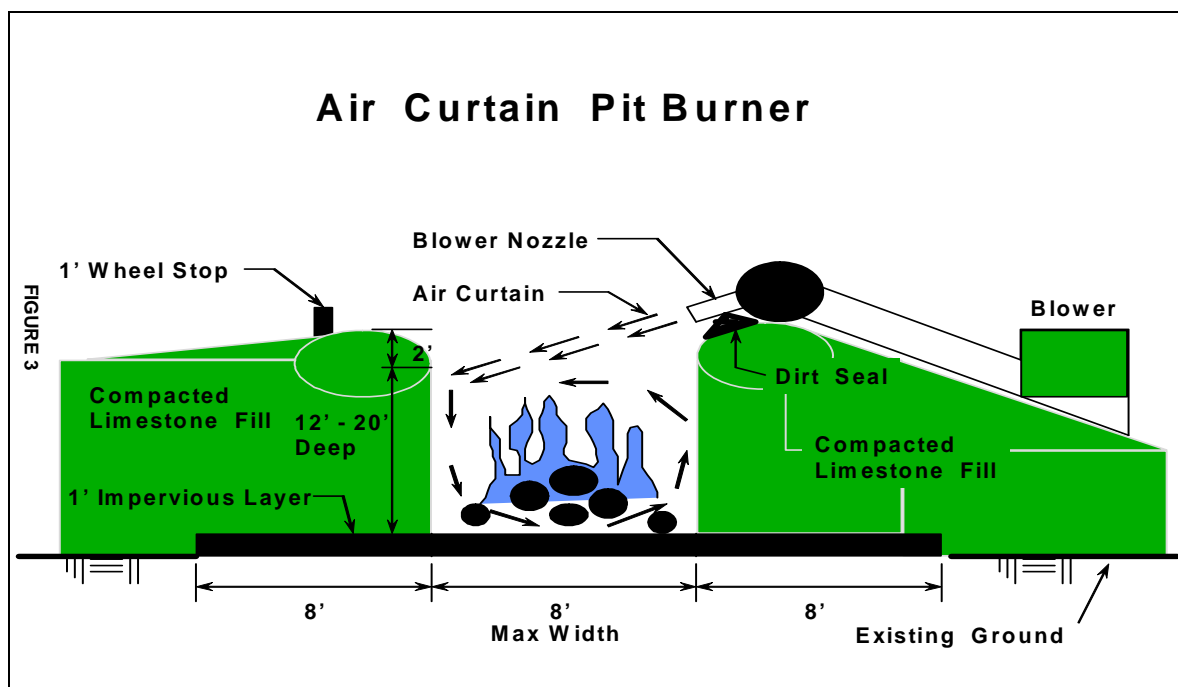
incorporated into the soil by the end of the operational day or sooner if the wood ash becomes dry and airborne.

- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged, and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris and the intense heat generated by the ACB device. Underground utilities need to be identified prior to digging pits for using the ACB device.
- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also, include information as to whether only commercial haulers or the general public may deposit waste.

Closeout of air curtain burner sites shall be within six (6) months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. TDSR sites



Based on FEMA 325, *Debris Management Guide*, Appendix H, Figure 2, 1999.



Based on FEMA 325, *Debris Management Guide*, Appendix H, Figure 3, 1999.

### Environmental Checklist for Air Curtain Pit Burners

Incineration site inspections will also include an assessment of the environmental controls being used by the Contractor. Environmental controls are essential for all incineration methods, and the following will be monitored.

- ☐ A setback of at least 1,000 feet should be maintained between the debris piles and the incineration area. Keep at least 1,000 feet between the incineration area and the nearest building. Contractor should use fencing and warning signs to keep the public away from the incineration area.
- ☐ The fire should be extinguished approximately two hours before anticipated removal of the ash mound. The ash mound should be removed when it reaches 2 feet below the lip of the incineration pit.
- ☐ The incineration area should be placed in an aboveground or below ground pit that is no wider than 8 feet and between 9 and 14 feet deep.
- ☐ Above ground incineration pits should be constructed with limestone and reinforced with earth anchors or wire mesh to support the weight of the loaders. There should be a 1-foot impervious layer of clay or limestone on the bottom of the pit to seal the ash from the aquifer.
- ☐ The ends of the pits should be sealed with dirt or ash to a height of 4 feet.
- ☐ A 12-inch dirt seal should be placed on the lip of the incineration pit area to seal the blower nozzle. The nozzle should overlap the pit edge by 3 to 6 inches.

- ☐ There should be 1-foot high, unburnable warning stops along the edge of the pit's length to prevent the loader from damaging the lip of the incineration pit.
- ☐ Hazardous or contaminated ignitable material should not be placed in the pit. This is to prevent contained explosions.
- ☐ The airflow should hit the wall of the pit about 2 feet below the top edge of the pit, and the debris should not break the path of the airflow except during dumping.
- ☐ The pit should be no longer than the length of the blower system and the pit should be loaded uniformly along its length.

#### **Land Application of Wood Ash from Storm Debris Burn Sites Guidelines**

- Whenever possible, soil test data and waste analysis of the ash should be available to determine appropriate application rate.
- In the absence of test data to indicate agronomic rates, application should be limited to 2 to 4 tons per acre/one time event. If additional applications are necessary, due to the volume of ash generated and time frame in which the ash is generated, then an ash management plan will be needed.
- Ash should be land applied in a similar manner as agricultural limestone.
- Ash should not be land applied during periods of high wind to avoid the ash blowing off the application sites.
- Ash should not be land applied within 25 feet of surface waters or within 5 feet of drainage ways or ditches on sites that are stabilized with vegetation. These distances should be doubled on sites that are not vegetated and the ash should be promptly incorporated into the soil.
- Records should be maintained to indicate where ash is applied and the approximate quantities of ash applied.
- As an option to land application, ash may be managed at a permitted municipal solid waste landfill after cooling to prevent possible fire.
- Assistance in obtaining soil test data and waste analysis of ash should be available through **Insert Appropriate Local or State Agency**.

### **Reducing the Potential for Spontaneous Combustion in Compost or Mulch Piles Guidelines**

---

- When ground organic debris is put into piles, microorganisms can very quickly begin to decompose the organic materials. The microorganisms generate heat and volatile gases as a result of the decomposition process. Temperatures in these piles can easily rise to more than 160 degrees Fahrenheit. Spontaneous combustion can occur in these situations.
- Spontaneous combustion is more likely to occur in larger piles of debris because of a greater possibility of volatile gases building up in the piles and being ignited by the high temperatures. If wind rows can be maintained 5 feet to 6 feet high and 8 feet to 10 feet wide, volatile gases have a better chance of escaping the piles; and the possibility of spontaneous combustion will be reduced.
- Turning piles when temperatures reach 160 degrees can also reduce the potential for spontaneous combustion. Pile turning provides an opportunity for gases to escape and for the contents of the pile to cool. Adding moisture during turning will increase cooling. Controlling the amount of nitrogen-bearing (green) wastes in piles will also help to reduce the risk of fire. The less nitrogen in the piles the slower the decomposition process and consequently the less heat generated and gases released.
- Large piles should be kept away from wooded areas and structures and should be accessible to fire fighting equipment, if a fire were to occur. Efforts should be made to avoid driving or operating heavy equipment on large piles because the compaction will increase the amount of heat build-up, which could increase the possibility of spontaneous combustion.

**APPENDIX I**

**DEBRIS MANAGEMENT EQUIPMENT ASSETS**

---

**THIS PAGE INTENTIONALLY LEFT BLANK**

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
101	1999	FORD	CROWN VICTORIA	2FAFP71W7XX172836	3,400
104	2003	FORD	CROWN VICTORIA	2FAFP71W13X143049	4,500
105	1998	FORD	CROWN VICTORIA	2FAFP71W4WX109708	5,280
106	2002	FORD	CROWN VICTORIA	2FAFP71W92X156274	3,858
107	2005	FORD	CROWN VICTORIA	2FAHP71WX5X174022	5,942
108	2005	FORD	CROWN VICTORIA	2FAHP71W15X174023	5,942
109	2005	FORD	CROWN VICTORIA	2FAHP71W35X174024	5,942
109-25	1994	CHEVROLET	Caprice	1G1BL52PXR164669	5,500
112	1999	FORD	CROWN VICTORIA	2FAFP71W5XX172835	3,400
112-10	1995	FORD	CROWN VICTORIA	2FALP71W0SX123585	5,280
113	1999	FORD	CROWN VICTORIA	2FAFP71W3XX172834	5,200
114	2005	FORD	CROWN VICTORIA	2FAHP71W55X174025	5,942
115	2005	FORD	CROWN VICTORIA	2FAHP71W75X174026	5,942
117	2002	FORD	CROWN VICTORIA	2FAFP71W22X156276	3,858
118-3	1997	FORD	CROWN VICTORIA	2FALP71W8VX127678	5,280
119-2	1997	FORD	CROWN VICTORIA	2FALP71W8VX127677	5,280
120	1998	HARLEY	FLHTPI	1HD1FMR18WY623445	1,500
120-40	1996	CHEVROLET	1 TON VAN	1GCGG35K2SF229642	8,600
121	1998	FORD	CROWN VICTORIA	2FAFP71W9WX109705	5,280
121-35	1996	FORD	CROWN VICTORIA	2FALP71W5TX129304	5,280
122	2002	FORD	CROWN VICTORIA	2FAFP71W02X156275	3,858
122-11	1996	FORD	CROWN VICTORIA	2FALP71W9TX129306	5,280
123	2003	FORD	CROWN VICTORIA	2FAFP71W83X143047	4,500
124	2003	FORD	CROWN VICTORIA	2FAHP71W03X221202	3,500
124-37	1996	FORD	CROWN VICTORIA	2FALP71W0TX129307	5,280
126	1998	FORD	CROWN VICTORIA	2FAFP71W3WX109702	5,280
126-58	1997	FORD	CROWN VICTORIA	2FALP71W3VX127683	5,280
127	2000	GMC	SAFARI	1GTDL19W1YB534162	6,000
127-57	1997	FORD	CROWN VICTORIA	2FALP71W7VX127685	5,280
128-60	1997	FORD	CROWN VICTORIA	2FALP71WXVX127681	5,280
129-59	1997	FORD	CROWN VICTORIA	2FALP71WVX127682	5,280
131	1998	FORD	CROWN VICTORIA	2FAFP71W7WX109699	5,280
132	2005	FORD	CROWN VICTORIA	2FAHP71W75X106664	4,013
134	2003	FORD	CROWN VICTORIA	2FAHP71W93X221201	4,026
136	2003	FORD	CROWN VICTORIA	2FAFP71WX3X143048	4,500
138	1998	FORD	CROWN VICTORIA	2FAFP71W1WX109701	5,280
148	2003	GRUMMAN	MT45 SWAT Van	4UZAAPBW73CK38647	19,000
150	2002	FORD	E-250	1FTNS24L02HA76113	8,600
151	2003	CHEVROLET	Tahoe	1GNFK13V83J302347	5,400
152	2005	HARLEY	FLHTPI	1HD1FMW1X5Y706944	600
153	2004	HARLEY	FLHTPI	1HD1FMW194Y723541	1,500
154	2005	HARLEY	FLHTPI	1HD1FMW145Y707233	600
155	1998	HARLEY	FLHTPI	1HD1FMR10WY623472	1,500
156	2003	HARLEY	FLHTPI	5HD1FMW1X3Y719585	1,500
157-49	1993	TOYOTA	Camry	4T1SK12E5RU410733	4,500
163	2003	FORD	CROWN VICTORIA	2FAHP71W23X181673	3,946
164	2003	FORD	CROWN VICTORIA	2FAHP71W03X181672	3,946
173	1997	KUSTOM	Speed Monitor	K9BS0819VK118700	1,000
174	2002	KUSTOM	Speed Monitor	1K9BL10102K110814	900
180	2004	CHEVROLET	1 TON PICK-UP	1GCHK23U64F243838	9,200
182	1941	PLYMOUTH	Special	11384698	3,200
183	1999	CHEVROLET	Tahoe	1GNEK13R2XR153850	5,400
189	2003	CHEVROLET	Malibu	1G1ND52JX3M731036	3,200
190	2003	CHEVROLET	Malibu	1G1ND52J83M730855	3,200
191	2003	CHEVROLET	Malibu	1G1ND52J33M731234	3,200
192	2000	HAULMARK	5X8 TRAILER	4XSCB0B19YG018314	500
193	2003	CHEVROLET	Impala	2G1WF55K439255432	3,472
194	2001	CHEVROLET	Impala	2G1WF55K419327789	4,476
196	2001	CHEVROLET	Impala	2G1WF55K719325583	4,476
197	2001	CHEVROLET	Impala	2G1WF55K919324533	4,476

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
199	2003	INTERNATIONAL	NAVISTAR16S2SC	1HTMGABM61A933287	25,900
200	2001	CHEVROLET	Blazer	1GMDT13W52K168794	5,500
203	1998	CHEVROLET	1 TON VAN	1GCHG35R5W1050371	9,200
204	1999	CHEVROLET	Lumina	2G1WL52M1X9269728	2,013
205	1999	CHEVROLET	Lumina	2G1WL52M5X9268386	2,013
206	2002	CHEVROLET	Malibu	1G1ND52J02M63997	3,200
207	2005	CHEVROLET	Impala	2G1WF52E459222951	3,200
208	1992	CHEVROLET	Caprice	1G1BL5371NR140432	5,500
209	2000	GMC	SONOMA EXT CAB	1GTCS19W7Y8249302	4,600
210	1988	CHEVROLET	1 TON VAN	1GAGG35K8J7121382	8,600
212	2001	FORD	E-450	1FDXE45S21HB66066	14,050
213	1995	FORD	CROWN VICTORIA	2FALP71W2SX176014	5,280
214	2002	GMC	SONOMA	1GTCS19W328181507	4,600
215	1996	FORD	CROWN VICTORIA	2FALP71W3SX123550	5,280
218	2004	CHEVROLET	Impala	2G1WF52E449313541	3,600
22	2005	RENTALS	Rentals	RENTALS	0
220	2005	CHEVROLET	Impala	2G1W52EX59356072	4,561
250	1990	STRICK	Trailer	MFO-00961	0
280	1990	CHEVROLET	Cavalier	1G1JC54GXL7142425	3,450
290	2003	CHEVROLET	SONOMA	1GCDT19X338288312	2,700
293	1997	CHEVROLET	Cavalier	1G1JC5241V7207111	3,683
294	1993	CHEVROLET	Caprice	1G1BL5376PW124652	5,500
296	2001	CHEVROLET	Aerostar	1GNEL19W81B143303	6,100
298	1997	CHEVROLET	Lumina	2G1WL52M7V1180161	3,800
299	1998	CHEVROLET	Blazer	1GNDT13W3WK173854	5,500
300	2002	HAULMARK	1/4T Trailer	16HCB08142H099826	500
3000	1992	HURST	Elect Jaw Life	69930	0
3001	1987	HURST	Elect Jaw Life	40032	100
3003	1998	HURST	Hyd Jaws Life	EOO418	100
3004	2003	DAYTON	3W739C	014340609	100
3005	2005	HONDA	222222	EA6-3164329	100
301	2005	PACE	CARGO	4FPWB263X5G097699	15,000
302	2005	PACE	CARGO	4FPWB263X5G097700	15,000
303	2003	PIERCE	DASH AERIAL	4P1CT02513A002901	65,000
304	2003	SCOTTY	Trailer	1SSTT35T1311SS766	10,000
305	2003	CHEVROLET	Suburban	1GNGK26U63R298740	9,200
306	1992	INTERSTATE	14PBS	1JKPBS207NA070018	15,000
3060	2004	WESTERN	WESTERN 8	60390	0
307	2005	CHEVROLET	3/4 TON PU	1GCHK232X5F933219	9,200
308	2005	CHEVROLET	VAN 12	1GNDM19X45B129194	5,900
309	2004	CHEVROLET	3/4 TON UT	1GBHK23224F212511	9,200
310	2004	W.Fire&Haz cont	GT30532HCS1X3	JM209-001-0504	5,300
311	2003	FORD	F-700	3FRXF75T84V652972	26,000
312	2006	FORD	F-350	1FTWW33P66EB55828	14,000
314	2006	CHEVROLET	Tahoe	1GNEK13Z56R154974	6,800
322	1973	KENTUCKY	45 FOOT	E992747	55,000
331	1986	PIERCE	Pumper	1P9CA01D4GA040314	0
333	1996	PIERCE	Pumper	4P1CT0256TA000643	55,000
334	2005	CHEVROLET	Malibu	1G1ZS52895F263117	4,234
335	2002	CHEVROLET	Malibu	1G1ND52J12M640073	3,053
336	2002	CHEVROLET	Malibu	1G1ND52J12M640395	3,053
337	2002	CHEVROLET	Malibu	1G1ND52J22M640390	3,053
339	2001	FORD	CROWN VICTORIA	2FAFP71W71X172973	3,858
340	2001	FORD	CROWN VICTORIA	2FAFP71W51X172972	3,858
343	2000	FORD	Expedition	1FMPU16L33YLC44791	3,500
344	1989	CHEVROLET	Suburban	1GNGV26J71F1165493	9,200
345	1990	VOLVO WHIT GMC	WCM64	4V2BCBUF4LN635642	55,000
347	2001	FORD	CROWN VICTORIA	2FAFP71W11X146871	5,100
349	1992	SAULSBURY	291009	4S7ET9D04NC005458	55,000
350	2004	PIERCE	Pumper	4P1CL01H004438	2,222

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
354	1998	FORD	E-450	1FDXE40F6WHA52556	15,000
355	2004	FREIGHTLINER	FL60	1FVACWT15HU32629	20,000
359	1994	FORD	F-250	1FTHF26M2RB80332	8,600
361	1995	FORD	CROWN VICTORIA	2FALP71W7SX178843	5,280
365	1997	FORD	CROWN VICTORIA	2FALP71W5VX127684	5,280
366	1997	FORD	Expedition	1FMFU181L9VLB09819	6,400
367	2003	CHEVROLET	Malibu	1G1ND52J93M622745	4,037
368	2004	FORD	CROWN VICTORIA	2FAHP71W04X109887	5,280
369	1999	FREIGHTLINER	FL60	1FV3GFBC3YHG70231	15,000
370	1999	FREIGHTLINER	FL60	1FVABPBW61HH58993	20,000
371	2003	FORD	CROWN VICTORIA	2FAHP71W63X179263	5,942
372	2004	CHEVROLET	Tahoe	1GNEK13Z44J235900	6,800
400	1989	CH&E	01600	P4785	80
4000	1990	MASTER HEATER	100,000 BTU	352933	40
4001	1979	HOMELITE	01600	2222	40
4002	1993	NPK	GXA	2222	1,000
4003	1984	HOMELITE	01600	HP1430048	100
4005	1980	SHINDANWA	T27	9011079	20
4006	1997	DAYTON	4B225	L969603022	200
4007	1997	LOOP SEALING	7014	LCAUSO415TT270862	10
4008	1997	STIHL	TS510	336676762	20
4009	1997	HOMELITE	CG4800	HS1180070	100
4010	1997	RYAN	544845B	98500211	100
4011	1997	STIHL	O26	311Y	5
4012	1997	POULAN	2050	97246D300512-3	5
4013	1997	POULAN	2050	972046D300510-3	5
4014	1998	REDLINE	123R	63146	10
4015	1998	JAPAN	Japan	22530	25
4016	1998	REDLINE	125R	65331	25
4017	1998	REDLINE	K-6R	2187	25
4018	1998	SWENSON	EV1001048	83368	1,000
4019	1997	HOMELITE	HCP420	GCO1-2709947	50
402	2004	Centreville	TA614-10MEDX	5JVB142941000594	10,000
4021	1998	WACKER	WP1550AW	5007528	100
4022	1998	WACKER	WP1550AW	5007525	100
4023	1995	HOMELITE	01600	HP1430048	50
4025	1999	MILLER	BOBCAT225DPLUS	KK057769	500
4026	1999	HOMELITE	EG-4300E	HT2788227S	50
4027	1999	SHINDANWA	T230	8073336	20
4030	1999	DAYTON	GEN/HEATER	7170361	50
4031	1999	DAYTON	GEN/HEATER	7170362	50
4032	1999	DAYTON	GEN/HEATER	7170356	50
4033	1999	DAYTON	GEN/HEATER	7170355	50
4034	1999	DAYTON	GEN/HEATER	7170397	50
4036	1999	DAYTON	GEN/HEATER	7170392	50
4037	1999	DAYTON	GEN/HEATER	7170396	50
4038	1999	DAYTON	GEN/HEATER	7170395	50
4039	1999	ECHO	BR400	52239	10
404	1999	MID-ATLANTIC	TRAILER GO	5ANNA1013XR004310	3,300
4041	1989	VALK	Snow Plow	222222	1,000
4042	1996	VALK	Snow Plow	22222	1,000
4043	1991	VALK	Snow Plow	222222	1,000
4044	1985	VALK	Snow Plow	222222	1,000
4046	1980	VALK	Snow Plow	222222	1,000
4047	1991	VALK	Snow Plow	222222	1,000
4048	1988	VALK	Snow Plow	222222	1,000
4049	1986	VALK	Snow Plow	17414	1,000
405	1980	VIBRATORY	Compactor	1553279	100
4050	1996	HENDERSON	FSH12X13DH409	18148	1,000
4051	1997	VALK	Snow Plow	222222	1,000

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
4052	1997	MONROE	Snow Plow	222222	1,000
4054	1984	VALK	Snow Plow	22222	1,000
4055	1990	VALK	Snow Plow	222222	1,000
4056	1996	MONROE	MP36R11ISCT	96-11-1098	1,000
4057	1998	MONROE	MP36R11ISCT	98-03-1377	1,000
4058	1998	MONROE	MP36R11ISCT	98-03-1376	1,000
4059	1997	MONROE	MP36R11ISCT	97-06-2379	1,000
406	2001	TRAIL EZE	Trailer Flat	1DA12TR982PO15745	40,000
4060	1988	VALK	Snow Plow	17415	1,000
4061	1988	VALK	Snow Plow	222222	1,000
4062	1988	VALK	Snow Plow	222222	1,000
4063	1996	HENDERSON	FSHSS	15052	1,000
4064	1998	HENDERSON	WWSHX10	WSH-20994	1,000
4065	1997	WESTERN	Snow Plow	60390-8	500
4067	2000	SPEED-AIR	4B239A	L3399-00242	100
4068	1987	SWENSON	FSHSS	WSH-20994	1,000
407	2003	Big Tow JDeere	Trailer Flat	4KNTB18284L160982	18,900
4070	2000	HENDERSON	WSHX14	WSH-20988	1,000
4071	1987	HENDERSON	FSHSS	222222	1,000
4072	1987	HENDERSON	FSHSS	10897	1,000
4073	1989	HENDERSON	FSHSS	15698	1,000
4074	1987	HENDERSON	FSHSS	15053	1,000
4075	2001	HENDERSON	8X409SS	FSP09641	500
4076	2001	MONROE	Snow Plow	01-07-3030	1,500
4077	2001	HENDERSON	7X409SS	FSP-10232	500
4078	2001	MONROE	MP36R11ISCT	01-07-3149	0
4079	2005	MONROE	222222	05-03-8819	5,000
408	1998	INGERSOL RAND	P185WJD	285095UAI221	1,000
4080	1999	WESTERN	Snow Plow	222222	500
4081	1997	BOBCAT	16 Planner	91020399	1,000
4082	1997	BOBCAT	Snow Plow	222222	0
4083	1997	BOBCAT	811	630002082	1,000
4084	2000	BOBCAT	72" SWEEPER	783704789	500
4085	2002	HENDERSON	7X409SS	FSP-10879	200
4086	2004	STIHL	MS260	261215854	20
4087	2004	STIHL	MS260	261318843	20
4088	2004	INGERSOL RAND	BX80WH	TE0464	100
4089	2004	STIHL	MS260	261710215	15
409	1999	MID-ATLANTIC	TRAILER GO	5ANNA1015XR004597	3,300
4090	2005	MONROE	2222	05-03-1960	5,000
4091	2005	MONROE	2222	05-03-1961	5,000
4092	2005	MONROE	2222	05-02-8775	5,000
4096	2005	SHINDANWA	222222	4090278	75
4097	2005	STIHL	222222	162992886	75
4098	2005	STIHL	222222	163703164	75
4099	2005	STIHL	222222	163703161	75
410	2000	JOHN DEERE	710D	T0710DJ891422	33,000
411	1990	GMC	Top Kick	1GDM7H1J5LJ606889	28,000
412	1998	JOHN DEERE	710D	TO710DJ839467	6,000
415	1992	PARTNER	HP40	2313078	20
417	2002	222222	CONCRETE CUTT	1269995	200
418	2003	LeeBoy	L7000T Paver	12465	5,000
419	2003	WANCO	WTSP75-LSA	5F11S101841000551	2,100
420	2004	WANCO	WTSP75-LSA	5F11S101X41000552	2,100
423	1994	STIHL	O26	229839333	5
424	1993	WILDCAT	M8500	6011	5,000
425	1993	INGERSOL RAND	RX-65	SR6354	100
426	1993	HOMELITE	176B140-C	H02510072	100
428	1990	MIKASA	MTR-60L	V9831	100
430	1990	MIKASA	MTR-60L	W-9991	100

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
431	1994	STIHL	O26	229839356	5
433	1994	STIHL	O26	229839719	5
434	2005	JOHN DEERE	624J	DW624JZ600720	31,400
435	2004	JOHN DEERE	710G	T0710GX941201	23,000
436	1994	SMITH	CPM8	9594	50
440	1985	GMC	GMC7000	1GDL7DIE8FV618152	28,000
446	1988	EAGER BEAVER	AP-10	1120AP206JS050431	5,000
449	2003	CHEVROLET	C7500TrkStepVan	1GBM7F1C03F520410	64,000
450	2001	VOLVO	VHD	4V5KC9UF72N331487	64,000
452	2000	VOLVO	AUTOCAR	4V5SC8JF11N521329	64,000
453	1985	JETAIR	Jet Air	NO15227	100
454	2003	SAKAI	SW300 ROLLER	VSW22-10105	10,000
455	1997	HYPAC	C747B	101170511562	5,000
457	1998	GMC	GMC7500	1GDM7H1J4WJ509896	28,000
458	1998	GMC	Top Kick	1GDM7H1JXWJ509708	28,000
459	2001	GMC	Top Kick Dump	1GDP7H1CX1J510932	33,000
460	2003	GMC	Top Kick	1GDP7JC23F515135	30,000
461	2001	GMC	Top Kick Dump	1GDP7H1C32J503449	30,000
462	1999	GMC	1 TON PICK-UP	1GTGC29U2XE551955	3,901
463	2002	AMERITRAIL	TKAR16610-70E	17YBP16242B023978	7,000
464	1972	ENCO	PAINT STRIPPER	3MCO	100
465	1997	CHEVROLET	1 TON PICK-UP	1GCHK34F8VFO54180	9,200
466	2000	GMC	GMC7500BUCKET	1GDM7H1C5YJ518336	33,000
468	2003	FORD	E-350	1FTSE34603HB71918	9,500
469	2005	CHEVROLET	C7500	1GBK7E1C55F517393	30,000
470	1998	CHEVROLET	Blazer	1GNDT13W8WK170240	5,500
471	1996	WELLS CARGO	EW1422	1WC200F27T1073301	10,000
472	2003	GMC	1 TON VAN	1GTHG35U831237278	9,600
473	1999	VOLVO	AUTOCAR	4V5SC8JF81N311083	64,000
474	1987	ECHO	SS18-KE	1197	4
475	1987	GARDEN DENVER	G100	R28227	10,000
476	1975	JAEGER	6" Pump	92221753	500
477	2004	GMC	GMC7500	1GDP7C1C44F514324	30,000
478	1997	SUNRAY	Signboard	380198	2,000
479	2003	Ver-Mac Trailer	PCMS1210	2S9US41593S132357	3,600
480	1999	GMC	1 TON PICK-UP	1GDHK34F7XF088268	9,200
481	1996	BOBCAT	863H	514412651	6,000
483	1989	HOMELITE	GRF-5R7	140D265374	100
485	1977	CLIPPER	C-188K88	P0937	200
490	1994	CHEVROLET	1 TON STEP VAN	1GBKP32Y3R3317120	14,000
491	1990	GMC	W5	J8D84B1H7L7000715	14,000
499	1997	GMC	1 TON DUMP	1GDKC34F9VJ508447	15,000
500	1997	JOHN DEERE	410E	T0410EX839443	20,000
5000	1996	POWER TRIMMER	TT-21A	35264	10
5001	1996	STOW	50000	9500635	50
5002	1996	STOW	VRC50HD	9500636	50
5003	1996	STOW	VRC50HD	9500637	50
5005	1996	HOMELITE	TRASH PUMP	HR1970054	50
5006	1996	STIHL	O21	3514485	4
5007	1997	STIHL	O26	237003365	4
5008	1998	REDLINE	123R	63148	60
5009	1998	REDLINE	2222	22499	60
501	2000	CHEVROLET	1/2 TON	1GCDL19W91B138597	5,850
5010	1998	REDLINE	125R	65926	50
5011	1998	REDLINE	K-6R	2188	50
5012	1995	ECHO	PB4600	01824	20
5013	1999	ENCO	HCP420	LMVE-27-1	50
5014	1999	SERVIS-RHINO	CY72	22030	50
5015	1999	GROBAN	50A	LMWG-21-7	50
5016	1999	EX-CELL	EXG-135010-2	9912198760	50

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
5017	1999	EX-CELL	EXG-135010-2	9912198761	50
5018	1999	EX-CELL	EXG-135010-2	9912198759	50
5019	2002	STIHL	O44	148535139	20
502	1991	STIHL	OO9L	222229004	5
5020	2002	STIHL	TS510	345741958	5
5021	2003	STIHL	TS510	345761857	25
5022	2002	222222	222222	2222222	0
5024	2002	Sewer Equip	1yd dumpattach	N/A	0
5025	2002	BOBCAT	8811 BacHoe	630100565	1,000
5026	2003	BOBCAT	42 inch Forks	222222	500
5027	2003	BOBCAT	74" C&I buckett	0304031532	500
5028	2003	BOBCAT	40 Hyd Plainer	991400234	1,000
5029	2003	BOBCAT	72 inch sweeper	783710301	0
503	1991	STIHL	OO9L	223382580	5
5031	2005	222222	222222	043331250	800
5032	2005	222222	222222	9611600002 00	150
504	1999	KOBOTA	M6800	M680-50636	50
505	2001	Centreville	1022-16MEDX997	1C9BT221011752997	6,350
506	1991	HUDSON	HA-16	10HHA1608M1000007	12,000
5066	1999	MEYERS	C-8	222222	0
507	2004	WANCO	WTSP75-LSA	5F11S101641000550	2,100
508	1991	STIHL	O44	1128911000	5
509	1991	POULAN	750HV	133	25
510	1991	STONE	SG155	J256B0208	20
511	1991	MQ	QP30ITH	301TH/0975	50
512	1992	HOMELITE	176B140-A	HL0920171	50
513	1993	STIHL	50000	24049455	5
514	2001	VIBROMAX	W265	JKC5304907	2,600
515	1995	DAYTON	22005	3252283	10
516	1985	WISCONSIN	WI-145	800634	50
518	1985	SHINDANWA	T20	4162414	20
519	1985	SHINDANWA	C-35	2063810	20
520	1990	EXMARK	M36-12.5	97951	100
521	1996	STIHL	TS 360AVS	133311764	5
522	2002	JOHN DEERE	710D	T0710DJ908988	0
523	2002	Sewer Equip	Trailer	1S9HF13122C381810	3,500
524	2002	Jet Away	JAJ600R	2810	500
525	2003	BOBCAT	A300 uniloder	523411145	8,000
530	1998	INGERSOL RAND	P185WJD	285096UAI221	1,000
550	2002	GMC	SONOMA	1GTCS19W828181633	4,600
551	2002	GMC	SONOMA	1GTCS19W828181809	4,600
560	1998	GMC	1 TON PICK-UP	1GTGK29F4WE526347	9,200
562	1999	GMC/UNION CITY	1 TON STEP VAN	1GDKP32YXX3500664	15,000
564	2003	CHEV/SUPREME	STEPVAN30000LB	1GBM7F1C43F520362	30,000
566	1998	CHEVROLET	1 TON PICK-UP	1GCHK34RWFO27005	9,200
569	2001	GMC	3/4 TON PICK-UP	1GTHK24U11Z280000	9,200
571A	1980	INGERSOL	BR40	TP634208	50
572	1999	GMC	1 TON PICK-UP	1GTGC34FOXF092109	9,000
573	2000	SRECO-FLEXIBLE	HV2000TR	4H5W31727YL002636	12,000
574	1998	GMC	1 TON PICK-UP	1GTGC24F4WZ543128	8,600
576	1987	MQ	MQD305R	87409	50
578	1996	GMC	Top Kick	1GDM7H1J7TJ508379	30,000
579	1998	GMC	Top Kick	1GDM7H1J5WJ510085	30,000
582	1992	JOHN DEERE	710C	TO710CJ778817	20,000
583	1988	HOMELITE	TRASH PUMP	H5137005	50
587	1989	GMC	1 TON STEP VAN	1GTHP32K8K3501413	14,000
589	2001	GMC	Top Kick	1GDV7H4CX1J514270	61,000
591	1990	HOMELITE	C-35	2222	20
593	1992	HOMELITE	111-B1B	1710022	50
594	1992	AIR COMPRESSOR	K5HGA-30P	3061792133	0

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
595	1985	STONE	9PM	3751025	100
597	2005	GMC	Stake Rollback	1GDE5C1225F518829	19,500
598	2005	GMC	1 1/2T UTILITY	1GBE4E32X5F519408	19,500
600	2004	BOBCAT	BobCat 553	520311878	0
6000	2004	BOBCAT	SB150X48SBLOWER	713300163	200
6001	2004	BOBCAT	BobCat 48" blad	705300362	0
6002	1990	STIHL	HT75	222222	20
6003	2001	ECHO	SRM-2601	03014169	20
6004	1998	HOMELITE	180	HR2490122	0
6008	1997	HONDA	WH15	GX110-2247219	100
601	1988	JOHN DEERE	544E	DW544ED516221	20,000
6012	2005	WESTERN	WESTERN 8	22222	0
6013	1997	TORO	CCR3000GTS	7914350	50
6014	1997	TORO	CCR3000GTS	7915495	50
6015	2003	ARIENS	1028	005615	100
6016	2005	ARIENS	1128 snowblower	022783	350
6017	2005	ARIENS	1128 snowblower	022422	350
6018	2005	ARIENS	11528 Snow Blow	009303	350
6019	2005	ARIENS	11528 Snow Blow	009302	350
6020	1999	ECHO	EDR-2100	503575	20
6021	2005	ECHO	222222	06018067	50
6022	1999	ECHO	PPT-2400	512735	20
6024	1999	STIHL	O26	2222222	20
6025	1998	EX-CELL	EXG-135010-2	9912251245	50
6026	2000	TORO	Mower	9925389	50
6027	2001	ECHO	EDR-2100	506372	20
6029	2001	ECHO	SRM-2400SB	222222	2
603	1996	GMC	Top Kick	1GDM7H1J8TJ508066	28,000
6030	2005	ECHO	PPT260 pro prun	06007762	200
6033	2005	ECHO	Power Blower	06007504	20
6034	2001	ECHO	HC-1600	522972	25
6035	2001	INGERSOL RAND	AIR COMPRESSOR	0010300247OR	100
6037	2002	ECHO	SRM-250	03021440	20
6038	2002	ECHO	HC-1600	526867	100
604	1997	CHEVROLET	C7500	1GBM7H1J1VJ115330	28,000
6041	2003	ECHO	SRM-2601	03031496	20
6042	2003	SHINDANWA	EB630 BP BLOWER	2102952	40
6043	2003	STIHL	MS360 CH SAW	256779021	20
6044	2003	STIHL	MS200T CH SAW	157555340X	20
6045	1998	MEYERS	C-8	9286	500
6046	2003	WACKER	BS 500	5386166	100
6049	2003	ECHO	HCA260	05002539	20
605	1990	HANNAY	5210C	26010261	500
6050	2003	STIHL	MS200T CH SAW	160928759	20
6051	2003	STIHL	PPT-2400	261499275	20
6052	2003	STIHL	PPT-2400	261499282	20
6053	2004	ECHO	PB4600	05009347	40
6054	2004	ECHO	PB4600	05009348	40
6055	2004	ECHO	HC160	05008462	40
6057	2004	METROWALKBEHIND	M3613KA MOWER	404066	0
6058	2004	ECHO	HCA260	06002372	25
6059	2004	ECHO	HCA260	06002547	25
606	2004	GMC	1 1/2T UTILITY	1GDE4E1274F517222	17,500
6060	2004	ECHO	PB4600	05009725	5
607	1999	KOBOTA	J98	222222	1,000
608	1992	CHEVROLET	1 TON PICK-UP	1GCGC24K4NE160017	8,600
610	1992	CHEVROLET	1T STAKE BODY	1GBHC34K4NE211434	9,200
611	1999	SNYDER	1000GAL	2222222	2,000
612	2005	GMC	3/4 TON PICK-UP	1GTHK29U25E180056	8,600
613	1986	GMC	GMC7000	1GDL7D1E1GV522039	28,000

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
613A	1986	AMERICAN ROADS	ALC-20-C	W-8-4925337	0
616	1993	STIHL	O66	7522	0
620	1994	GMC	1 TON PICK-UP	1GTGC24K5RE559346	8,600
621	1987	FORD	F-700	1FDPF70K4HVA15635	28,000
621A	1983	AMERICAN ROADS	ALC-20-C	W-34920889	0
622	1987	FORD	F-700	1FDPF70K2HVA15634	28,000
622A	1979	AMERICAN ROADS	ALC-20-C	624600	0
623	1995	TORO	38180	5917552	50
624	1995	TORO	38180	5917544	50
625	1995	TANKA	TLE550	P247643	50
627	1987	GMC	GMC7000	1GDL7DIE0HV518503	28,000
627A	1987	AMERICAN ROADS	ALC-20-C	W-87-4927075	0
645	1998	CHEVROLET	1 TON PICK-UP	1GCHK34R1WZ213535	8,600
649	1988	GMC	GMC7000	QGDM7D1E6JV505586	28,000
650	2000	GMC	3/4 TON PICK-UP	1GTGK29F9YF491088	8,600
651	1988	GMC	GMC7000	1GDL7D1E8JV516861	28,000
651A	1988	AMERICAN ROADS	ALC-25-C	ALC-25-C	0
653	2001	GMC	3/4 TON PICK-UP	1GTHC23U71F172691	9,200
660	1985	FORD	F-700	1FDPF70K5FVA69054	28,000
660A	1981	AMERICAN ROADS	ALC-20-C	W-14916140	0
670	1996	VOLVO WHIT GMC	EXP2	4V5DCFMD1TR730282	50,000
671	2005	AUTOCAR	EXP64	5V CDC6BE15H201373	64,000
673	1992	VOLVO WHIT GMC	WX64	4V2DCFMD2NN651484	50,000
674	1995	VOLVO WHIT GMC	EXP64	4V5DCFMDOTR725543	50,000
675	1998	VOLVO WHIT GMC	WX64	4V2DC2UE5YN234253	55,000
676	2001	VOLVO WHIT GMC	WX64	JV2DC6UE41N327732	50,000
677	2001	VOLVO WHIT GMC	EXP64	4V2DC6UE22N331084	64,000
678	2002	VOLVO	EXP2	4V2DC6UE93N3471999	64,000
679	2004	VOLVO	EXP2	4V2DC6LF14N360444	64,000
691	1996	FORD	4630	3194513	5,000
692	1998	BUSHHOG	275	12-01191	500
697	1991	EXMARK	20447	36-12B-5	500
700	2001	MASSEY FERGUSEN	MF4233	J15308	20,000
7001	1997	STIHL	O26	234206252	0
7002	1997	STIHL	O26	236710479	0
7004	1997	ECHO	SRM-3100	11619	0
7006	1997	ECHO	PB400E	504468	0
7007	1997	HYPRO	4101C	727510185	0
7008	1999	STIHL	HT75	222222	0
7009	1999	SCAG	Mower	3140918	0
701	1992	MasterTrack	MT253-6	1C9GA8E12NGO99246	10,000
7011	2000	ECHO	BP400E	548718	50
7012	1995	HOMELITE	HY-16	HP2431044	0
7013	1999	SCAG	SE-3.5BS	4800585	0
7015	1995	KIFCO	3160	10509	0
7016	1995	POULAN	3400	222222	0
7017	1995	STIHL	O44	222222	0
7018	1995	HONDA	EX1000	222222	0
7019	1995	ECHO	PB400E	162516	0
702	2001	FORD	F-550	1FDAF56F81ED60080	19,500
7022	1995	TORO	GTS2	6906420	0
7023	1995	TORO	GTS2	6906420	0
7024	1995	JACOBSEN	548100 seeder	82201	0
7025	1995	HOLLAND	LELEY SEEDER	9500640	0
7026	1995	HOLLAND	LELEY SEEDER	9500640	0
7027	2000	BUSHHOG	50A	1201851	200
7028	2000	ECHO	BP400E	548731	50
7029	1999	EX-CELL	EXG-135010-2	9912251247	50
703	2001	WAYNE	06TPUKEZ-10-VZ	15576	5,000
7030	2000	LITTLE-WONDER	9810HO	199247514	50

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
7031	1996	WESTERN	WESTERN 8	60390-8	500
7032	2000	ECHO	SRM-2601	101007	20
7034	1999	ERSKINE	1812	12360	500
7035	2000	KWIK-WAY	35-12510	1125	500
7036	2000	SUPER SCRAPER	P/N 6716018	P22442248112R	500
7037	1999	EX-CELL	EXG-135010-2	9912198758	50
7038	1999	EX-CELL	EXG-135010-2	9912251249	50
7039	1999	EX-CELL	EXG-135010-2	9912251246	50
704	2001	WAYNE	Stake Rollback	8906	2,000
7040	1993	SPEED-AIR	2Z499D	222222	100
7041	2001	ECHO	PB400E	552247	50
7042	2001	ECHO	PB400E	552834	50
7043	2001	SCAG	SWZ4814KA	4060122	200
7044	2001	MASSEY FERGUSEN	MF1217	000600	1,500
7045	2001	MASSEY FERGUSEN	MF1038	582	1,500
7046	1999	KWIK-WAY	35-13010	M049540150	200
7047	2002	ARIENS	1028	001160	350
7048	2002	ARIENS	1028	001162	350
7049	2003	ECHO	SRM260	05016678	50
705	2001	WAYNE	8' Dump Rollbac	222222222	3,000
7050	2003	ECHO	SRM260	05016725	50
7051	2003	HONDA	EX4500 GEN	EX4500SK1A	50
7052	2003	LITTLE-WONDER	Power Blower	1030601819	50
7053	2004	ARIENS	1028	021093	350
7054	2004	ARIENS	1028	008774	350
706	2001	GMC	1 TON VAN	1GTHG35R821127549	9,500
7060	2004	STIHL	BR420C Magnum	262870717	45
7061	2004	STIHL	BR420C Magnum	262870724	45
7062	2004	STIHL	BR420C Magnum	262870704	45
7063	2004	STIHL	HL100Z	263162582	45
7064	2004	STIHL	HL100Z	263162403	45
7065	2004	STIHL	FS85R	262994512	45
7066	2004	STIHL	FS85R	262994499	45
7067	2004	STIHL	FS85R	262994314	45
7068	2004	SCAG	SW236A15KA	9020277	0
7069	2004	STIHL	FS80R WEEDEATER	2222222	0
707	2005	GMC	Top Kick	1GDK7C1C95F519711	30,000
709	1982	JACOBSEN	AERATOR	82591-F2889	0
710	1984	HOWARD	HR-20-130WU	020-3-39890	0
711	1988	JOHN DEERE	50A	M0050AB100955	0
712	1988	JOHN DEERE	25A	P00025A635208	0
713	1988	EXMARK	Mower	20447	0
714	1988	EXMARK	Mower	20346	0
715	1989	TORO	22005	70008J1	0
716	1989	TORO	22005	7000830	0
722	1994	CUSTOM TRAILER	LC4-16	1YB321532RB1T305	10,000
723	1994	WELLS CARGO	WELL CARGO	1WC200J25R1062538	12,000
725	1995	SMITHCO	13-551	675	0
726	1995	BUSHHOG	LEAF VACCUM	12-01053	0
727	1995	MASSEY FERGUSEN	253-2WD	5485C41123	10,000
728	1995	JACOBSEN	AERATOR	82592 2435	0
729	1995	TURFCO	F12D	598729	0
730	1996	CHEVROLET	1 TON DUMP	1GBKC34F1TJ108422	15,000
731	1996	CHEVROLET	1 TON PICK-UP	1GCHK34R7TE235204	9,200
733	1999	JACOBSEN	HR9016	7052201753	0
734	2000	BOBCAT	751 G	515730588	0
735	2001	WENGER	ENCORE	1W9SE2820YM174024	16,000
737	2003	GMC	GMC2500HD4x46pk	1GTHK23U83F184337	9,200
738	2004	EXMARK	LZ27KC604	500122	500
739	2004	EXMARK	LZ27KC604	500415	500

EQ. NO	YEAR	MAKE	MODEL	SERIAL	GVW
740	2005	TORO	Mower	250001572	1,200
741	2005	TORO	Mower	250001575	1,200
813	1989	ORION	ORION I	2B1119770K6002344	30,000
815	1997	GILLIG	Phantom	15GCA2119V1088635	30,000
816	1998	GILLIG	Phantom	15GCA2110V1088636	30,000
817	1998	GILLIG	Phantom	15GCA2110W1088637	30,000
818	1998	GILLIG	Phantom	15GCA2112W1088638	30,000
819	1998	GILLIG	Phantom	15GCA2114W1088639	30,000
820	1998	GILLIG	Phantom	15GCA2110W1088640	30,000
821	2003	GILLIG	Phantom	15GCA271331112346	36,220
822	2003	GILLIG	Phantom	15GCA271531112347	36,220
823	2003	GILLIG	Phantom	15GCA271731112348	36,220
824	2003	GILLIG	Phantom	15GCA271931112349	36,220
825	2003	GILLIG	Phantom	15GCA271531112350	36,220
826	2003	GILLIG	Phantom	15GCA271731112351	36,220
905	1986	MASTER HEATER	18 Heater	31470	0
908	1991	CHEVROLET	1 TON STEP VAN	1GBHP32KXM3305285	9,200
909	1992	CHEVROLET	1 TON VAN	1GCGG35K1N7117753	8,600
911	1998	CHEVROLET	1 1/2T UTILITY	1GBKC34F1VJ111498	15,000
912	1999	GMC	1 TON PICK-UP	1GCGC34R3XF076688	9,300
915	2003	GMC	VAN CARGO	1GTHG35U931158363	5,364
916	2003	GRANGERS	GP-2000-OMTC	1007497	50
918	1994	CLARK	GPS30MB	GP138MB-02946966K0F	6,000

**APPENDIX J**

**FEDERAL EMERGENCY MANAGEMENT AGENCY  
(FEMA)  
DEBRIS MANAGEMENT POLICIES AND GUIDELINES**

## TABLE OF CONTENTS

### 9523 Emergency Work

9523.4 Demolition of Private and Public Facilities .....	J-3
9523.11 Hazardous Stump Extraction and Removal Eligibility.....	J-7
9523.12 Debris Operations – Hand-Loaded Trucks and Trailers.....	J-11
9523.13 Debris Removal from Private Property .....	J-13

### 9525 Allowable Costs

9525.3 Duplication of Benefits – Non-Government Funds.....	J-16
------------------------------------------------------------	------

### 9580 Fact Sheets

9580.4 Debris Operations - Emergency Contracting VS Emergency Work.....	J-18
9580.5 Legal Responsibility for Removing Debris from Private Property.....	J-20
Debris Removal Applicant’s Contracting Checklist.....	J-21

### FEMA Public Assistance Debris Management Information

Debris Management Contracting and Monitoring .....	J-25
Debris Management Eligibility and Documentation.....	J-27
Debris Management Planning .....	J-29

### Other FEMA Sources:

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended  
The Code of Federal Regulations -- Title 44  
FEMA 321 - PA Policy Digest  
FEMA 322 - PA Guide (replaced FEMA 286)  
FEMA 323 - PA Applicant Handbook  
FEMA 324 - PA Eligibility  
FEMA 325 - PA Debris Management Guide

*This Annex contains Federal Emergency Management Agency (FEMA) policies and guidance. It is strongly recommended that the following FEMA web site be consulted to ensure that any new, changes, or deletions in policy or guidance are up to date.*

FEMA web site: <http://www.fema.gov/government/grant/pa/9500toc.shtm>

**POLICY NUMBER 9523.4**

**DEMOLITION OF PRIVATE AND PUBLIC FACILITIES**

1. Date Published: November 9, 1999
2. Response and Recovery Policy Number: 9523.4
3. Title: Demolition of Private and Public Facilities
4. Purpose: This policy provides guidance in determining the eligibility of structures for demolition under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288 as amended (Stafford Act).
5. Scope and Audience: This policy is intended to guide Federal Emergency Management Agency (FEMA) personnel responsible in making eligibility determinations for the Public Assistance grant program. The provisions of this policy relating specifically to Section 404 Hazard Mitigation buyouts and relocations are a formalization, continuation and refinement of the concept contained in the 1995 policy memorandum referenced in Paragraph 9. The other provisions of this policy are unchanged from the Interim policy issued on September 14, 1999.
6. Background: This policy applies to the exercise of authorities for emergency work and permanent recovery. Recent disasters highlighted the lack of common understanding of the appropriate application of the authorities of Sections 403 and 407 of the Stafford Act. This policy supersedes Interim Policy #9523.4 issued on September 13, 1999 and incorporates provisions for the application of emergency authorities to Section 404 Hazard Mitigation buyout and relocation projects.

FEMA sometimes is requested to pay for the demolition of public and private structures in the aftermath of declared disasters. The most frequent use of demolition authority is to use Section 403 of the Stafford Act to fund the demolition of unsafe structures that endanger the public. Section 406 of the law, which funds the permanent repair of eligible structures, also has been used to fund demolition when demolition has been part of funding of a FEMA-approved Section 406 project. Section 407 of the law may be used to clear debris and wreckage resulting from a major disaster when it is determined to be in the public interest.

7. Policy:
  1. Insurance. When demolition is covered by an insurance policy, the insurance proceeds must be used as the first source of funding.
  2. Special Considerations. Historic and environmental requirements must be addressed unless otherwise exempted. The following provides general guidance.

Stafford Act Reference	National Environmental Policy Act	Other Federal Laws (National Historical Preservation Act, Endangered Species, Clean Water Act), Regulations, EO's
Section 403 and 407	Not required (statutorily excluded; see Section 316 of the Stafford Act)	Required (some laws have special procedures in emergency circumstances)
Section 406	Depends on Associated Eligible Action <ol style="list-style-type: none"> <li>1. Not required with repair substantially to pre-disaster condition project. Statutorily excluded; see Section 316 of the Stafford Act.</li> <li>2. Required when determined as independent from a repair to pre-disaster condition project.</li> <li>3. Required with improved or alternate projects.</li> </ol>	Required

1. Basic Eligibility for Demolition. In order to be eligible for demolition and debris removal, an eligible applicant must incur an eligible expense. Upon meeting the above requirements, Public Assistance Program funds may be used for demolition and debris removal.
  1. Section 403 Funding.
    1. Publicly-owned and eligible Private Nonprofit (PNP) structures. Demolition and removal of debris is eligible for publicly-owned structures and the eligible structures of eligible PNP organizations when:
      - the structures were damaged by the disaster, and
      - the structures are determined to be unsafe and pose an immediate danger to the public, and
      - the work is completed within the completion deadlines outlined in 44CFR 206.204 for emergency work.
    2. Privately-owned damaged structures.
      - Privately-owned damaged structures may be eligible for Public Assistance grant funding for demolition (and the removal of debris from the demolition) if they meet the criteria in the three bullets contained in Paragraph 7.C.1.a. and liability and legal permission requirements are met.
      - Generally, the removal of the debris from private property is not an eligible cost unless the disaster caused very severe and widespread damage and the removal of the debris is necessary: to eliminate an immediate threat to life, public health and safety; to eliminate immediate

- threats of significant damage to improved public or private property; or to ensure the economic recovery of the affected community to the benefit of the community-at-large.
- Except in very unusual circumstances, such as erosion under slabs on a hillside, slabs or foundations do not constitute debris or wreckage, nor do they present a health or safety hazard to the general public. Broken slabs, or slabs incapable of supporting a new structure, typically do not constitute a public health or safety hazard. Slabs removed primarily for reconstruction purposes are not eligible for removal as disaster-related debris.
  - Individuals and private organizations (except for eligible PNPs with documentation of their efforts on property for which they are responsible) will not be reimbursed for their efforts on their own properties.
3. Debris removal using the economic recovery criterion normally is restricted to the removal of disaster-related debris from large commercial areas to expedite restoration of the economic viability of the affected community.
  4. To address current health and safety requirements, the following building demolition costs are eligible: capping wells, pumping and capping septic tanks, and filling in basements and swimming pools. The removal or covering of pads and driveways is not considered part of the emergency demolition of structures.
  5. Structures condemned as safety hazards before the disaster are not eligible for demolition and resulting debris removal under Public Assistance grant authority.
  6. Habitable (but not yet damaged) structures are not eligible for demolition under Public Assistance grant authority even when they are in serious danger of total destruction (e.g., on a failing slope).
2. Section 407 Funding.
    1. This authority may be used to fund removal of debris and wreckage caused by a major disaster when the Director, FEMA, determines that the removal would be in the public interest.
    2. Generally, the removal of debris is in the public interest only when it is necessary to:
      - eliminate immediate threats to life, public health, and safety, or
      - eliminate immediate threats of significant damage to improved public or private property, or
      - ensure economic recovery of the affected community to the benefit of the community at large. The use of this criterion normally is restricted to the removal of disaster-related debris from large commercial areas to expedite restoration of the economic viability of the affected community.

3. Structures may not be demolished using this authority unless the structures can be defined as debris or wreckage caused by the major disaster. The following criteria also apply:
    - the structures were damaged by the disaster, and
    - the structures are determined to be unsafe and pose an immediate danger to the public (or the Regional Director otherwise determines that their removal is clearly in the public interest), and
    - the structures have been uninhabited since the major disaster.
  4. While timely action is required, the timeline for emergency work does not govern the use of this authority.
  5. Structures condemned as safety hazards before the disaster are not eligible for demolition and resulting debris removal under Public Assistance grant authority.
  6. Except in very unusual circumstances, such as erosion under slabs on a hillside, slabs or foundations do not constitute debris or wreckage, nor do they present a health or safety hazard to the general public. Broken slabs, or slabs incapable of supporting a new structure, typically do not constitute a public health or safety hazard. Slabs removed primarily for reconstruction purposes are not eligible for removal as disaster-related debris.
  7. The removal of substantially damaged structures and the removal of slabs, driveways, fencing, garages, sheds and similar appurtenances are eligible costs when the property is part of a Section 404 Hazard Mitigation buyout and relocation project. In each case, the principle structure must have been substantially damaged by the disaster, as determined by the local building official.
3. Section 406 Funding of Permanent Work.
    1. Demolition of a structure and removal of debris may be funded when demolition is required:
      - as part of a Public Assistance program repair, replacement, or construction project,
      - as part of a relocation required by the FEMA Regional Director under 44 CFR 206.226(e)(2), or
      - as part of an approved relocation cost when a Public Assistance program structure is being moved out of the 100 year floodplain.
    2. Demolition also may be funded when it is part or all of an approved alternate project for the welfare of the general public.
8. Supersession: This policy replaces RR #9523.4, *Interim Policy on Demolition of Private and Public Facilities*, issued September 14, 1999.
  9. Reference: Memorandum dated March 30, 1995, "Demolition of Flood Damaged Structures Under Section 403 of the Stafford Act," from Richard W. Krimm, Associate Director, Response and Recovery Directorate, to Richard T. Moore, Associate Director for Mitigation.
  10. Authorities: Stafford Act, Sections 403, 406 and 407; 44 CFR 206.
  11. Originating Office: Infrastructure Division, Response and Recovery Directorate.
  12. Review Date: Two years from date of publication



# FEMA

## RECOVERY POLICY - RP9523.11

**I. TITLE: Hazardous Stump Extraction and Removal Eligibility**

**II. DATE:** May 1, 2006

**III. PURPOSE:**

Establish criteria used to reimburse applicants for removing eligible hazardous stumps from public or, where authorized, private property.

**IV. SCOPE AND AUDIENCE:**

The policy is applicable to all major disasters and emergencies declared on or after the date of publication. It is intended for all personnel involved in the administration and execution of the Public Assistance Program, including applicants.

**V. AUTHORITY:**

Sections 403 and 407 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5206, as amended.

**VI. BACKGROUND:**

Public Assistance regulations authorize reimbursement for the removal of debris from public and private land when it is in the public interest. Such removal is in the public interest when it is necessary to eliminate immediate threats to life, public health and safety, or eliminate immediate threats of significant damage to improved public or private property; or to ensure economic recovery of the affected community to the benefit of the community at large. Trees that are uprooted during a disaster event such that all or part of their roots are exposed may pose an immediate threat to public health and safety.

**VII. POLICY:**

A. When a disaster event uproots a tree or stump (i.e., 50% or more of root ball is exposed) on a public right-of-way, improved public property or improved property owned by certain private nonprofit organizations, and the exposed root ball poses an immediate threat to life, public health and safety, FEMA may provide supplemental assistance to remove, transport, dispose, and provide fill for the root cavity of an eligible uprooted tree or stump. The Federal Emergency Management Agency (FEMA) will reimburse applicants reasonable costs for this type of work only when uprooted stumps are more than 24 inches in diameter (measured two



## FEMA

### RECOVERY POLICY - RP9523.11

feet from the ground), with the consensus of the Applicant and the State, and is approved in advance by FEMA, using the attached Hazardous Stump Worksheet.

1. If it is necessary to remove an uprooted stump before it can be inspected by FEMA because it poses a threat that must be dealt with immediately, the applicant must submit documentation, to FEMA including photographs, that establishes its location on public property, specifics on the threat, stump diameter measured two feet up the trunk from the ground, quantity of material to fill the hole, and any special circumstances.

2. FEMA will reimburse applicants for extraction, transport and disposal of stumps with a diameter of 24 inches or smaller at the unit cost rate for regular vegetative debris, using the attached Stump Conversion Table, as such stumps do not require special equipment.

3. FEMA will reimburse applicants at the unit cost rate (usually cubic yards) for normal debris removal for all stumps, regardless of size, placed on the rights-of-way by others (i.e., contractors did not extract them from public property or property of eligible Private Non Profit organization). In such instances, applicants do not incur additional cost to remove these stumps – the same equipment is used to pick up “regular” debris can be used to pick up these stumps.

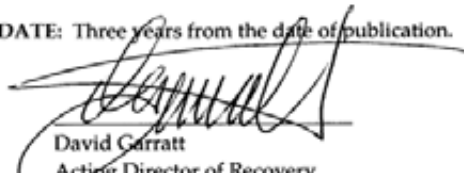
4. If an applicant incurs additional costs in picking up large stumps (over 24 inches in diameter) from rights-of-way, it should complete the Hazardous Stump Worksheet and present documentation to FEMA in advance for consideration.

5. Stumps with less than 50% of their root ball exposed should be cut flush at ground level, and the cut portion included with regular vegetative debris. Straightening or bracing of trees is not eligible for reimbursement.

**VIII. ORIGINATING OFFICE:** Recovery Division (Public Assistance Branch)

**IX. SUPERSESSION:** This Policy Directive supersedes all previous guidance on this subject.

**X REVIEW DATE:** Three years from the date of publication.

  
David Garratt  
Acting Director of Recovery  
Federal Emergency Management Agency

### Stump Conversion Table

#### Diameter to Volume Capacity

The quantification of the cubic yards of debris for each size of stump in the following table was derived from FEMA field studies conducted throughout the State of Florida during the debris removal operations following Hurricanes Charley, Frances, Ivan and Jeanne. The following formula is used to derive cubic yards:

$$\frac{[(\text{Stump Diameter}^3 \times 0.7854) \times \text{Stump Length}] + [(\text{Root Ball Diameter}^3 \times 0.7854) \times \text{Root Ball Height}]}{46656}$$

0.7854 is one-fourth Pi and is a constant.

46656 is used to convert cubic inches to cubic yards and is a constant

The formula used to calculate the cubic yardage used the following factors, based upon findings in the field:

- Stump diameter measured two feet up from ground
- Stump diameter to root ball diameter ratio of 1:3.6
- Root ball height of 31"

Stump Diameter (Inches)	Debris Volume (Cubic Yards)	Stump Diameter (Inches)	Debris Volume (Cubic Yards)
6	0.3	46	15.2
7	0.4	47	15.8
8	0.5	48	16.5
9	0.6	49	17.2
10	0.7	50	17.9
11	0.9	51	18.6
12	1	52	19.4
13	1.2	53	20.1
14	1.4	54	20.9
15	1.6	55	21.7
16	1.8	56	22.5
17	2.1	57	23.3
18	2.3	58	24.1
19	2.6	59	24.9
20	2.9	60	25.8
21	3.2	61	26.7
22	3.5	62	27.6
23	3.8	63	28.4
24	4.1	64	29.4
25	4.5	65	30.3
26	4.8	66	31.2
27	5.2	67	32.2
28	5.6	68	33.1
29	6	69	34.1
30	6.5	70	35.1
31	6.9	71	36.1
32	7.3	72	37.2
33	7.8	73	38.2
34	8.3	74	39.2
35	8.8	75	40.3
36	9.3	76	41.4
37	9.8	77	42.5
38	10.3	78	43.6
39	10.9	79	44.7
40	11.5	80	45.9
41	12	81	47
42	12.6	82	48.2
43	13.3	83	49.4
44	13.9	84	50.6
45	14.5		

## Hazardous Stump Worksheet

Applicant: _____		Date: _____					
Applicant Representative: _____		Signature: _____					
FEMA Representative: _____		Signature: _____					
State Representative: _____		Signature: _____					
Physical Location (i.e., Street address, road cross streets, etc.)	Describe Facility (ROW, Park, City Hall, etc.)	Hazard Yes No	GPS (Decimal Degrees)	Tree Size (Dia.)	Eligible Yes (Green) No (Red)	Fill CY	Comments
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							



# FEMA

## RECOVERY POLICY - RP9523.12

**I. TITLE: Debris Operations – Hand-Loaded Trucks and Trailers**

**II. DATE:** May 1, 2006

**III. PURPOSE:**

To describe the criteria the Federal Emergency Management Agency (FEMA) will use to reimburse applicants for eligible debris removal accomplished with trucks and trailers loaded physically by hand, rather than with mechanical equipment.

**IV. SCOPE AND AUDIENCE:**

The policy is applicable to all major disasters and emergencies declared on or after the date of publication. It is intended for all personnel involved in the administration and execution of the Public Assistance Program, including applicants.

**V. AUTHORITY:**

Sections 403 and 407 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5206, as amended.

**VI. BACKGROUND:**

A. Debris removal companies under contract with local governments have frequently supplemented their vegetative debris removal operations by hiring subcontractors who modify their trucks and trailers by extending sidewalls with plywood or other materials to increase the vehicle's load capacity. Because of the tenuous nature of these improvements, operators typically load these vehicles physically by hand. The inefficiencies associated with loading these trucks or trailers by hand, instead of using mechanical equipment, effectively negates the increased capacity advantages of these vehicles. Hand loading cannot achieve compaction levels comparable to mechanically loaded vehicles. Further, the unit cost for transporting debris is based on mechanical loading of trailers and trucks.

B. FEMA performed studies throughout the State of Florida following the four devastating hurricanes in 2004 and determined that a mechanically-loaded vehicle had a weight-to-volume ratio at least twice that of hand-loaded vehicles. In other words, vehicles of the same measured capacity that were loaded by mechanical equipment and reasonably compacted carried at least



## FEMA

### RECOVERY POLICY - RP9523.12

twice the volume of debris as those loaded physically by hand. FEMA has therefore determined it is not reasonable to reimburse applicants - for hand-loaded vehicles and mechanically loaded vehicles - at the same rate.

#### VII. POLICY:

A. Debris monitors located at temporary or final debris disposal sites will reduce the observed capacity of each hand-loaded truck or trailer load by 50% because of the low compaction achieved by hand-loading. For example, if a 40 cubic-yard (CY) hand-loaded truck or trailer arrives at a debris management or disposal site, and it appears to be 100 percent full, the actual quantity of debris in the truck or trailer will be recorded as 20 CY  $((40 \text{ CY} / 2) * 100\%)$ . In the same manner, if the truck or trailer appears half full, the load will be recorded as 10 CY  $((40 \text{ CY} / 2) * 50\%)$ . The maximum amount recorded for a hand-loaded vehicle will be 50% of its measured capacity.

B. FEMA will reimburse applicants on the basis of capacities calculated in VII-A.

VIII. ORIGINATING OFFICE: Recovery Division (Public Assistance Branch)

IX. SUPERSESSION: Not applicable.

X REVIEW DATE: Three years from the date of publication.



David Garratt  
Acting Director of Recovery  
Federal Emergency Management Agency

**POLICY NUMBER 9523.13**

**DEBRIS REMOVAL FROM PRIVATE PROPERTY**

1. Date Signed: October 23, 2005
2. Recovery Division Policy Number: 9523.13
3. Title: Debris Removal from Private Property
4. Purpose: This revised policy is being issued to include the areas devastated by Hurricane Rita under this guidance and provide guidance on debris removal from commercial private property. This policy provides guidance on the appropriate use of funding as provided for in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, for debris removal and disposal, including demolition of unsafe structures, (hereafter referred to as “debris removal”) from private property in areas where Hurricanes Katrina and Rita caused catastrophic damage. This will ensure consistency in the use of Sections 403 and 407 funding among the Joint Field Offices in the states of Alabama, Louisiana, Mississippi and Texas. It will also decrease the time it takes to deliver funding to the catastrophically impacted areas by streamlining the process through which applicants demonstrate compliance with the requirements in Sections 403 and 407 of the Stafford Act.
5. Scope and Audience: This policy applies only to catastrophically damaged areas in the states of Alabama, Louisiana, Mississippi and Texas under FEMA-1605-DR-AL, FEMA-1603-DR-LA, FEMA-1607-DR-LA, FEMA-1604-DR-MS, and FEMA-1606-DR-TX, respectively. It is intended to guide all personnel responsible for the administration of the FEMA Public Assistance grant program.
6. Background:
  1. Sections 403 and 407 of the Stafford Act, 42 U.S.C. 5170b and 5173, provide FEMA authority to fund debris removal from private property provided that the State or local government arranges an unconditional authorization for removal of the debris, and agrees to indemnify the Federal government against any claim arising from the removal.
  2. The regulations implementing Sections 403 and 407 of the Stafford Act at 44 CFR § 206.224 establish the requirement that debris removal be in the “public interest” in order to be eligible for reimbursement. “Public interest” is defined as being necessary to:
    1. eliminate immediate threats to life, public health, and safety; or
    2. eliminate immediate threats of significant damage to improved property; or
    3. ensure economic recovery of the affected community to the benefit of the community at large.
  3. Hurricanes Katrina and Rita have in some areas created catastrophic, widespread destruction resulting in vast quantities of debris which may require state or local government to enter private property to remove it in order to prevent disease and other immediate public health and safety threats. In these situations, debris removal from private property may be in the public interest and thus may be eligible for reimbursement, when the unconditional authorization for debris removal and indemnification requirements established by Sections 403 and 407 of the Stafford Act are met.
  4. Debris removal from private property generally does not include strictly commercial sites. It is assumed and expected that these commercial enterprises

retain insurance that can and will cover the cost of debris removal. The removal of debris from private commercial property by a state or local government is eligible for FEMA reimbursement when such removal is in the public interest

7. Policy: The following guidance for reimbursement of state, county and municipal governments for costs incurred in debris removal from private property applies to major disaster declarations FEMA-1603-DR-LA, FEMA-1604-DR-MS, FEMA-1605-DR-AL, FEMA-1606-DR-TX and FEMA-1607-DR-LA.
  1. FEMA will work with each State to designate those areas where the debris is so widespread that removal of the debris from private property is in the “public interest” under 44 CFR § 206.224 and thus is eligible for FEMA reimbursement.
  2. States, counties and municipalities ordinarily rely on condemnation and nuisance abatement authorities and obtain a right-of-entry from private property owners prior to the commencement of debris removal work. There may be circumstances, however, where the State or local government determines that ordinary condemnation and nuisance abatement procedures and the obtaining of a right of entry from each property owner are too time consuming to address an immediate public health and safety threat.
  3. Any State or local government that intends to remove debris from private property must, prior to commencement of work, submit a written request to the Federal Coordinating Officer (FCO) seeking approval for reimbursement. The written request and any accompanying attachments must include the following provisions:
    1. The request concerns conditions determined by the relevant State, county or municipal government's Department of Health or equivalent public health authority to be an immediate public health and safety threat.
    2. A detailed explanation certifying the requesting entity's legal responsibility, duty and authority to remove debris from private property, and has satisfied all required legal process and received all necessary permissions for such actions.
    3. Confirmation that a legally-authorized official of the requesting entity has ordered the exercise of public emergency powers or other appropriate authority to enter onto private property in order to remove/reduce a public health and safety threat via debris removal.
    4. The requesting entity indemnifies the Federal government and its employees, agents, and contractors.
  4. When deciding whether to authorize the removal of debris from private commercial property, the FCO should determine if it is necessary to: eliminate an immediate threat to life, public health, safety or significant damage to improved property, 44 CFR § 206.224(a)(1) and (a)(2); or ensure economic recovery of the affected community to the benefit of the community-at-large, 44 CFR § 206.224(a)(3).

In making a determination, the FCO will consider the following factors relative to an immediate threat to public health and safety:

- Is there a substantial risk that human remains may be intermixed with the debris creating an immediate public health and safety threat?
- Is the commercial property in such close proximity to residential property and the level of destruction so catastrophic that it is impossible to delineate between residential and commercial property and debris?
- Can the threat to public health and safety be lessened or eliminated by placing a fence around the property?

- Generally, the removal of debris from commercial private property is not eligible when the sites are separated from residential or business districts. Examples of these areas are industrial parks and woodland areas.
  - or the following factors relative to the economic recovery of the community-at-large:
    - What specific financial reasons are preventing the business from removing its own debris?
    - Does the business have the financial capability to reopen if and only if the government removes the debris?
    - What effect will the restoration of the business have with respect to the economic recovery of the community to the benefit of the community-at-large?
5. FEMA is prohibited from approving funds that would result in a duplication of benefits, and therefore, State and local governments must take reasonable steps to prevent such an occurrence. These steps include the requesting entity's agreement to research whether insurance coverage exists for the debris removal accomplished on each piece of private property in the project. If it is discovered that duplication of benefits has occurred, the State or local government must agree to make reasonable efforts to recover such proceeds paid to the property owners and remit in a timely fashion to FEMA.
  6. For those instances where the State or local government determines that ordinary condemnation and nuisance abatement procedures and the obtaining of a right of entry are too time consuming, the FCO will also require a written opinion from the relevant State's Office of the Attorney General confirming the legal basis under state constitutional and statutory authority for the State, county and municipal governments to enter private property to perform debris removal.
  7. All private property requiring debris removal must be identified and requested to FEMA in accordance with this policy within 90 calendar days of the declaration. After FEMA approval, emergency debris removal must begin within 180 calendar days from declaration. . These deadlines may be extended by the FCO based on circumstances beyond the control of the State or local government.
  8. The FCO will approve or disapprove in writing each written request for private property debris removal within five business days of receiving the request from the State or local government. After receiving approval from the FCO, the State or local government may begin identified private property debris removal activities and the application process for supplemental assistance through the Public Assistance Program.
8. Supersession: This policy replaces Recovery Policy Number 9523.13, dated September 7, 2005
  9. Authorities: Sections 403 and 407 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and the implementing regulations at 44 CFR § 206.224.
  10. Originating Office: Public Assistance Branch, Recovery Division, FEMA, U.S. Department of Homeland Security.

**POLICY NUMBER 9525.3**

**DUPLICATION OF BENEFITS - NON-GOVERNMENT FUNDS**

1. Date Published: October 30, 2000
2. Response and Recovery Directorate Policy Number: 9525.3
3. Title: Duplication of Benefits - Non-Government Funds
4. Purpose: This policy clarifies the issues related to grants and cash donations from third parties for emergency and permanent work under the Public Assistance Program.
5. Scope and Audience: This policy amends the policy of the same title issued on August 17, 1999. Due to the nature of the change, this policy is retroactive to that date. This policy is intended for Federal Emergency Management Agency (FEMA) personnel in making eligibility determinations for the Public Assistance Program and is applicable to all emergency and permanent work done under Public Assistance program grants.
6. Background:
  - A. Communities and private non-profit institutions often look for assistance from the general public, private institutions, and Federal and State agencies to help rebuild their infrastructure following a disaster. This assistance may come in the form of donations, insurance proceeds, volunteer work, or grants. With multiple entities providing assistance, it is possible for different sources to allocate funds to repair the same project. This action may constitute a duplication of benefits.
  - B. Section 312 (a) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288 as amended states that no entity will receive assistance for any loss for which financial assistance has already been received from any other program, from insurance, or from any other source. The use of Federal and/or State funds granted for the same purpose clearly constitutes a duplication of benefits. However, grant or cash donations provided by a private benefactor also may constitute a duplication of benefits.
  - C. Part 13 of 44 CFR allows, but does not require, the credit of third party donations to the non-federal cost share. FEMA's position on the credit of third party donations was to require grant and cash donations designated solely for eligible work to be used to reduce total project cost. In early 2000, it was demonstrated that this policy was unacceptably burdensome, especially on small government applicants, and on private nonprofit organizations (PNPs) without other sources of income. Therefore, the application of this policy was modified to allow all eligible applicants to use cash donations, and possibly grants (depending on source and conditions), for the non-federal share of project costs.
7. Policy:
  - A. Grants and cash donations designated for specific eligible work. Grants and cash donations from non-Federal sources designated for the same purpose as Federal disaster funds generally are considered a duplication of benefit. However, cash donations and grants from non-Federal sources designated for the same purpose as Federal disaster funds may be used for the non-Federal cost-share. Funds exceeding the amount of the non-Federal obligation must be used to reduce the total project cost. If donated funds designated for specific eligible work exceed the amount of the non-Federal obligation, FEMA headquarters will provide the methodology for calculating the adjusted project cost and adjusted non-Federal share.
  - B. Grants and cash donations not designated for specific eligible work. Unless otherwise prohibited, grants and cash donations received for unspecified purposes

- (e.g., "for disaster recovery/relief efforts"), or for work not eligible for FEMA assistance, do not constitute a duplication of benefits.
- C. Insurance. Disaster assistance will not be provided for damages covered by insurance. Disaster assistance provided by FEMA is intended to supplement assistance from other sources; therefore, insurance proceeds should be an applicant's first alternative for disaster assistance. An adjustment for the amount that should be received from insurance coverage is required even if the applicant has not completed negotiations with the insurer.
  - D. The retention of duplicated funds is illegal. Duplicated Federal funds must be returned to FEMA.
- 8. Supersession: This policy revises and replaces RR Policy #9525.3, Duplication of Benefits-Non-Government Funds that was issued on August 17, 1999.
  - 9. Authorities: Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 312; 44 CFR 13.24 and 206.226(a).
  - 10. Originating Office: Infrastructure Division, Response and Recovery Directorate.
  - 11. Review Date: Five years from date of publication.

**POLICY NUMBER 9580.4**

**DEBRIS OPERATIONS - CLARIFICATION: EMERGENCY CONTRACTING VS.  
EMERGENCY WORK**

**Response and Recovery Directorate Policy Number:** 9580.4

**Date Published:** January 19, 2001

**SUMMARY:** Contracting for debris operations, even though it is "emergency work" in FEMA operations, does not necessarily mean the contracts can be awarded without competitive bidding. Applicants should comply with State laws and regulations, but should be aware that non-competitive contracting is acceptable ONLY in rare circumstances where there can be no delay in meeting a requirement. In general, contracting for debris work requires competitive bidding. The definition of "emergency" in contracting procedures is not the same as FEMA's definition of "emergency work".

**DISCUSSION:** There appears to be some confusion regarding the awarding of some contracts, especially for debris, without competitive bidding. The reason cited for such actions is that the contract is for emergency work, and competitive bidding is not required.

Part 13 of 44 CFR is entitled "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments". These requirements apply to all grants and subgrants to governments, except where inconsistent with Federal statutes or regulations authorized in accordance with the exception provisions of Section 13.6. In essence, these regulations apply to all Federal grants awarded to State, tribal and local governments.

Non-competitive proposals awarded under emergency requirements are addressed as follows:

"Procurement by non-competitive proposals may be used only when the award of a contract is infeasible under small purchase procedures, sealed bids, or competitive proposals and one of the following circumstances applies:

(A) .....

(B) The public exigency or emergency of the requirement will not permit a delay resulting from competitive solicitation." (44 CFR Part 13.36(d)(4)(1)(B))."

Staff of the Office of General Counsel and the Office of the Inspector General have expressed concern that contracts are being awarded under this section without an understanding of the requirement. Simply stated, non-competitive contracts can be awarded only if the emergency is such that the contract award **cannot be delayed by the amount of time required to obtain competitive bidding.**

FEMA's division of disaster work into "emergency" and "permanent" is generally based on the period of time during which the work is to be performed, and not on the urgency of that work. Therefore, the award of non-competitive contracts cannot be justified on the basis of "emergency work", as defined by FEMA.

In some situations, such as clearing road for emergency access (moving debris off the driving surface to the shoulders or rights-of-way), or removal of debris at a specific site, awarding a non-competitive contract for site-specific work may be warranted; however, normally, non-competitive bid awards should not be made several days (or weeks) after the disaster or for long-term debris removal. Obviously, the latter situations do not address a public exigency or emergency which "will not permit a delay resulting from competitive solicitation".

Regarding competitive solicitations, applicants can use an expedited process for obtaining competitive bids. In the past, applicants have developed a scope-of-work, identified contractors that can do the work, made telephone invitations for bids, and received excellent competitive bids. Again, applicants must comply with State and local bidding requirements.

Please remind applicants that no contractor has the authority to make determinations as to eligibility, determinations of acceptable emergency contracting procedures, or definitions of emergency work. Such determinations are to be made by FEMA.

**POLICY NUMBER 9580.5**

**LEGAL RESPONSIBILITY FOR REMOVING DEBRIS FROM PRIVATE PROPERTY**

Policy Number 9580.5

Date Published: May 16, 2005

The purpose of this fact sheet is to explain how an eligible applicant must demonstrate it has the legal responsibility to remove debris from private property. Public Assistance Program regulations require that applicants be legally responsible for performing work for which they seek reimburse from FEMA.

FEMA regulations authorize the provision of assistance for debris removal from publicly and privately owned lands and waters when it is in the “public interest” to do so, and the work is performed by an eligible applicant with legal responsibility for the work. State and local governments have inherent legal authority over public property and FEMA has determined that it is in the public interest to remove disaster-related debris from public property, including public rights-of-way. Therefore, reimbursement for these costs is eligible under FEMA’s Public Assistance Program. The removal of debris from private property may be in the public interest when it is required to eliminate or lessen an immediate threat to life and safety, to reduce a threat of additional damage to improved property or to promote economic recovery of the community at large. FEMA evaluates requests for debris removal from private property on a case-by-case basis.

In addition to meeting one of the above criteria for private property debris removal, an eligible applicant must demonstrate that it has the legal responsibility to remove the debris. Usually, a state or local government has broad discretion under its police powers to take a variety of actions to protect its citizens from harm. This discretion is often codified in local laws, ordinances, or codes. For purposes of the Public Assistance Program, the community must demonstrate the legal basis upon which it exercised or intends to exercise its discretion following a major disaster or emergency.

If the community has determined that debris on private property presents a health and safety hazard and FEMA concurs, the community must follow the same legal procedure it uses in non-disaster situations to eliminate, remove or abate hazards. For example, if a community’s nuisance abatement ordinance requires the community to eliminate a hazard and charge the owner for the cost if the owner fails to abate the hazard, we would expect the community to follow this procedure in a post-disaster environment. If the ordinance gives the community discretion to waive the cost of abating the hazard (i.e. not charging the property owner), FEMA will review the community’s historical application of the ordinance to determine if the community has in the past waived its costs for abating a hazard on private property. Disasters where there is a high concentration of debris on private property over a widespread area presenting an immediate health and safety hazard may not warrant a community applying its ordinary ordinance process precisely. In these cases, FEMA will evaluate the community’s demonstration of legal responsibility to remove debris from private property on a case-by-case basis. The community must provide detailed information, including copies of relevant laws, codes and ordinances, explaining its legal authority for removing debris from private property.

A community’s condemnation of property and/or obtaining signed rights-of-entry and hold harmless agreements from property owners do not demonstrate the community’s legal responsibility for the purposes of the Public Assistance Program.



FEMA

# RECOVERY DIVISION FACT SHEET

## DEBRIS REMOVAL APPLICANT'S CONTRACTING CHECKLIST

### Overview

To be eligible for reimbursement under the Public Assistance Program, contracts for debris removal must meet rules for Federal grants, as provided for in 44 CFR Part 13.36 *Procurement* ([http://www.access.gpo.gov/nara/cfr/waisidx\\_04/44cfr13\\_04.html](http://www.access.gpo.gov/nara/cfr/waisidx_04/44cfr13_04.html)). Public Assistance applicants should comply with their own procurement procedures in accordance with applicable State and local laws and regulations, provided that they conform to applicable Federal laws and standards identified in Part 13. The following guidance is provided to assist Public Assistance applicants in the procurement process.

### Contracting Process Checklist

- ☐ Use competitive bidding procedures. Complete and document a cost analysis to demonstrate price reasonableness on any contract or contract modification where adequate price competition is lacking, as detailed in 44 CFR 13.36(f).
- ☐ Provide a clear and definitive scope of work and monitoring requirements in the request for proposals/bids. Use acceptable emergency contracting procedures that include an expedited competitive bid process only if time does not allow for more stringent procedures.
- ☐ Require bidders to provide copies of references, licenses, financial records, and proof of insurance and bonding.
- ☐ Obtain review from your legal representative of your procurement process and any contract to be awarded to ensure they are in compliance with all Federal, State, and local requirements.
- ☐ Document procedures used to obtain/award contracts (procurement information, bid requests and tabulations, etc).
- ☐ Use load ticket requirement to record with specificity (e.g., street address) where debris is picked up and the amount picked up, hauled, reduced and disposed of.

*FEMA will, when requested by applicants, assist in the review of debris removal contracts. However, such a review does not constitute approval.*

Prepared By: Public Assistance Branch - Date Prepared: April 10, 2006 - Page 1 of 4



FEMA

## RECOVERY DIVISION FACT SHEET

# DEBRIS REMOVAL APPLICANT'S CONTRACTING CHECKLIST

### Contract Provisions Checklist

**All contracts must contain/reflect the following provisions:**

- ☐ All payment provisions must be based on unit prices.
- ☐ No payments may be based on time and material costs unless limited to work performed during the first 70 hours of actual work following a disaster event.
- ☐ That payment will be made only for debris that FEMA determines eligible, referencing FEMA regulations and Public Assistance guides and fact sheets. (This is an optional provision to protect the applicant, and is used only following a major disaster declaration.)
- ☐ An invoice provision requiring contractors to submit invoices regularly and for no more than 30-day periods.
- ☐ A "Termination for Convenience" clause allowing contract termination at any time for any reason.
- ☐ A reasonable limit on the period of performance for the work to be done.
- ☐ A subcontract plan including a clear description of the percentage of the work the contractor may subcontract out and limiting use of subcontractors to only those you approve.
- ☐ The preference that the contractor use mechanical equipment to load and reasonably compact debris into the trucks and trailers.
- ☐ The requirement that the contractor provide a safe working environment, including properly constructed monitoring towers.
- ☐ Option of a unit price for extracting from ground and removing FEMA-eligible stumps (only for stumps with diameters larger than 24 inches, measured 24 inches above the ground, and with 50% or more of the root ball exposed), or including all stumps in the unit price.

Prepared By: Public Assistance Branch - Date Prepared: April 10, 2006 - Page 2 of 4



**FEMA**

## **RECOVERY DIVISION FACT SHEET**

### **DEBRIS REMOVAL APPLICANT'S CONTRACTING CHECKLIST**

#### **Contract Provisions Checklist - Continued**

**All contracts must contain/reflect the following provisions:**

- ☐ Requirement that all contract amendments and modifications be in writing.
- ☐ Requirement that contractor obtain adequate payment and performance bonds and insurance coverage.

#### **Pre-Disaster and Stand-By Contracts Checklist**

- ☐ The solicitation for a pre-disaster contract must adequately define in the proposed scope of work all the potential types of debris, typical haul distances, and size of events for which the contract may be activated.
- ☐ You may request bids for multiple scenarios for varying sizes of events.
- ☐ To ensure reasonable debris removal costs, award pre-disaster debris removal contracts based on either unit prices (volume or weight) or time and material.
- ☐ If the contract is awarded on a time and material basis, it should be limited to no more than 70 hours of actual clearance and removal operations.
- ☐ After the initial 70-hour period, payment should be on a unit price basis (volume or weight).



FEMA

## RECOVERY DIVISION FACT SHEET

### DEBRIS REMOVAL APPLICANT'S CONTRACTING CHECKLIST

#### Avoidance Checklist

- ☐ **DO NOT:** Award a debris removal contract on a sole-source basis.
- ☐ **DO NOT:** Sign a contract (including one provided by a contractor) until it has been thoroughly reviewed by your legal representative.
- ☐ **DO NOT:** Allow any contractor to make eligibility determinations, since only FEMA has that authority.
- ☐ **DO NOT:** Accept any contractor's claim that it is "FEMA certified." FEMA does not certify, credential, or recommend debris contractors.
- ☐ **DO NOT:** Award a contract to develop and manage debris processing sites unless you know it is necessary, and have contacted the State for technical assistance concerning the need for such operations. Temporary debris storage and reduction sites are not always necessary.
- ☐ **DO NOT:** Allow separate line item payment for stumps 24 inches and smaller in diameter; these should be treated as normal debris.
- ☐ **DO NOT:** "Piggyback" or utilize a contract awarded by another entity. Piggybacking may be legal under applicable state law; however, the use of such a contract may jeopardize FEMA funding.
- ☐ **DO NOT:** Award pre-disaster/stand-by contracts with mobilization costs or unit costs that are significantly higher than what they would be if the contract were awarded post-disaster. Such contracts should have variable mobilization costs depending upon the size of the debris work that may be encountered.

## FEMA PUBLIC ASSISTANCE DEBRIS MANAGEMENT INFORMATION

### Debris Management Contracting and Monitoring

Applicants may use force account labor and resources to accomplish part or all of the work after a disaster or they may use contractors. If contractors are used to do part or all of the work, the Applicant must follow FEMA contracting guidelines to ensure maximum reimbursement for debris removal and disposal efforts.

#### Acceptable Contract Types

1. **Time and Materials** – **Cannot be used for more than 70 hours of actual work.** This type of contract is usually used immediately after a disaster to mobilize contractors to start emergency removal efforts. These contracts should have a termination clause and a not-to-exceed limit for both time and costs. The contract should be terminated when the first of these limits is reached.
2. **Unit Price** – **Is usually used when the scope of work is hard to define and is based on estimated quantities of debris.** Unit price contracts are based on weight (tons) or volume (cubic yards). These contracts require close monitoring during removal, hauling and disposal to ensure accuracy.
3. **Lump Sum** – **Should only be used when the scope of work is clearly defined and the areas of work can be precisely identified.** Lump sum contracts establish one price for all work included in the contract. The price is fixed unless the scope of work changes. This type of contract is easy to monitor when the scope is well-defined.

A pre-awarded contract for emergency services may be used if the contract was competitively bid and prices are comparable with established rates in the region. The contract issuer may be a jurisdiction or a regional operational authority. “Piggybacking” by using an existing contract established by another jurisdiction is **not** recognized by FEMA as an acceptable form of contracting.

Cost plus a percentage, contingency contracts, and contracts awarded to debarred contractors are **not** allowed.

#### Contract Monitoring/Debris Monitoring

As a condition of the FEMA grant funding program, the Applicant is responsible for ensuring that the contract is properly monitored so that quantities and expenses are documented to substantiate FEMA funding.

- ✓ Monitors should verify that debris picked up is eligible; measure truck load capacities; verify volumes or weights of debris in trucks; inspect pick-up areas, haul routes, temporary storage sites, and disposal sites; verify the contractor is working in assigned areas; and ensure other contract requirements are met.
- ✓ The Applicant should train and deploy debris monitors to watch and document contractor activities. Debris monitors may come from the Applicant’s full-time work force, temporary hires, or contracted services. The Applicant may also request FEMA/State assistance with debris monitoring. The costs of overtime, temporary hires, and contractors performing disaster-related debris removal work are eligible for reimbursement.
- ✓ For unit price contracts, the Applicant should use load tickets to document weights and volumes of contractor vehicles and loads.

- ✓ For time and materials contracts, the Applicant should document the times that Contractor manpower and equipment are actively used (limited to 70 hours).

The Applicant can request debris monitor training from the State and FEMA

**Contracting Tips:**

- ✓ FEMA does not recommend, pre-approve, or certify any debris contractor.
- ✓ Only FEMA has the authority to make eligibility decisions; **contractors cannot make eligibility determinations.**
- ✓ FEMA does not credential any personnel other than official employees and Technical Assistance Contractor personnel.
- ✓ Contracts should have a well-defined scope of work, specified costs, basis of payment, and delivery schedule.
- ✓ Contracts must be competitively bid and have “reasonable” costs.
- ✓ FEMA will participate in uniform practices of reimbursing mutual aid costs if a written agreement was signed prior to the disaster occurring.
- ✓ Communities cannot guarantee a minimum number of hours for a time and materials contract.
- ✓ For reimbursement, Applicants must be able to provide FEMA with documentation of competitive bidding, bid tabulation, contract monitoring including field monitoring of debris operations, quantity of debris handled, payment, and force account costs (if applicable).

**Contracting/Monitoring References**

FEMA 321, Policy Digest  
FEMA 322, Public Assistance Guide  
FEMA 325, Debris Management Guide  
FEMA 329, Debris Management Brochure  
FEMA 9580.1, Debris Operations Job Aid  
FEMA 9580.4, Fact Sheet: Debris Operations

## FEMA PUBLIC ASSISTANCE DEBRIS MANAGEMENT INFORMATION

### Debris Management Eligibility and Documentation

#### Eligibility

Funds are available through FEMA's Public Assistance grant program to reimburse Applicants for eligible expenses incurred in performing disaster-related debris management operations. Determination of eligibility is a FEMA responsibility. **Contractors do not have the authority to make eligibility determinations.**

Generally, disaster-related debris located on public property and in public rights-of-way is eligible for FEMA reimbursement. Eligible disaster debris may include downed trees and other woody debris; sand, silt, mud and gravel; building wreckage; and vehicles in the right-of-way.

**Debris on private property generally is not eligible for funding under the Public Assistance Program**, but disaster-damaged personal property may be moved to the curbside to be picked up by an eligible Applicant. Under extenuating circumstances, FEMA may approve removal of debris from private property on a case-by-case basis. Applicants should contact their State Emergency Management Agency for additional information prior to debris removal. Disaster debris that threatens private property may be eligible under FEMA's Individual Assistance Program.

#### Additional Eligibility References

FEMA 321, *Public Assistance Policy Digest*, p. 28. <http://www.fema.gov/pdf/rrr/pd/pdigest.pdf>

FEMA 322, *Public Assistance Guide*, pp. 45-47. <http://www.fema.gov/rrr/pd/paguided.shtml>

FEMA 325, *Public Assistance Debris Management Guide*  
<http://www.fema.gov/rrr/pa/dmgtoc.shtml>

FEMA 329, *Debris Management Brochure* <http://www.fema.gov/rrr/pa/dmgbroch/shtm>

FEMA 9580.1, *Public Assistance Debris Operations Job Aid*  
[http://www.fema.gov/pdf/rrr/pa/9580\\_1.pdf](http://www.fema.gov/pdf/rrr/pa/9580_1.pdf)

44 CFR 206.224 (included in FEMA 322, Appendix C)

*Robert T. Stafford Disaster Relief and Emergency Assistance Act*, Sections 403 and 407 (included in FEMA 322, Appendix B)

### **Documentation**

As part of the grant application process, FEMA requires Applicants to provide detailed documentation to substantiate their claims. Types of documentation that an Applicant should have readily available for FEMA review include:

- ✓ Insurance policies
- ✓ Contracting process documentation (RFQs, bid tabulations, etc.)
- ✓ Contracts used for debris removal and disposal
- ✓ Time sheets documenting type of employee and labor hours/Contractor time sheets
- ✓ Equipment usage logs with drivers, mileage, and dates used
- ✓ Load tickets/Truck scale records
- ✓ Debris Management Site addresses
- ✓ Debris monitoring reports (used to document work performed and to identify issues that arose)
- ✓ Environmental baseline information
- ✓ Final disposal locations and tipping fees

### **Public Assistance Debris Eligibility Checklist**

- ☐ The Applicant is a local government agency, State government agency, Indian tribe, or Private Nonprofit organization.
- ☐ The debris or wreckage is on public property or in the public right-of-way.
- ☐ The Work is a direct result of a Presidentially declared disaster.
- ☐ The Work is occurring within the designated disaster area.
- ☐ The Work is the responsibility of the Applicant at the time of the disaster.
- ☐ The Work eliminates threats to life, public health, or safety; OR
- ☐ The Work eliminates immediate threats of significant damage to improved public or private property; OR
- ☐ The Work ensures economic recovery of the affected community to the benefit of the community-at-large.
- ☐ The cost to remove debris is “reasonable” and is competitive with established rates in the region. (Contractors are used; the contract meets FEMA contracting requirements.) AND/OR
- ☐ In-house equipment is used to remove debris. Detailed usage logs are kept.
- ☐ In-house, full-time personnel are used in debris management field operations. Eligible overtime is documented.
- ☐ Temporary/backfill employees perform debris-related work. Regular and overtime is documented.

## FEMA PUBLIC ASSISTANCE DEBRIS MANAGEMENT INFORMATION

### Debris Management Planning

Natural disasters such as hurricanes, tornadoes, wind storms, floods, fires and earthquakes, as well as man-made events such as civil unrest and terrorist attacks can generate large volumes of debris over a short period of time. It is advantageous to have a coordinated debris management plan developed in advance of a debris-generating event to expedite the response and recovery process.

Elements of a coordinated debris management plan are highlighted in the column to the right and are discussed in greater detail below.

#### Organization

An organizational structure, identifying specific roles and responsibilities, must be established in the debris management plan in order to clearly identify who will activate the plan and oversee the associated activities. The organization structure should include the following:

- ✓ The overall Debris Manager for your jurisdiction's operations
- ✓ The Debris Managers/Points of Contact for support agencies
- ✓ Administrative support staff
- ✓ Field support staff/debris monitors
- ✓ A Public Information Officer for debris
- ✓ State and Federal partners.
- ✓ Private contractors, if needed.

#### Site Selection

Pre-identifying debris management sites in advance of a debris-generating event expedites response and recovery. The following site characteristics items should be considered when selecting debris management sites:

- ✓ Publicly owned land
- ✓ Large open spaces – should be at least 10 acres; greater than 50 acres is ideal
- ✓ Relatively flat topography
- ✓ Good ingress and egress
- ✓ Minimal effect on residential neighborhoods, educational facilities, health care facilities, and environmentally sensitive areas
- ✓ Located near final disposal sites to reduce hauling distances, if possible
- ✓ Does not contain wetlands, endangered species, rare ecosystems, or other environmental restrictions
- ✓ Does not impact historic or archaeological sites
- ✓ Can accommodate separation and reduction of types of debris: vegetative, construction & demolition, household hazardous waste, commercial hazardous waste, etc.
- ✓ Can accommodate types of site operations that may take place: chipping, grinding, air curtain burning, open pit burning, recycling

### **Additional Debris Planning References**

FEMA 325, *Public Assistance Debris Management Guide*

<http://www.fema.gov/rrr/pa/dmgtoc.shtm>

FEMA 329, *Debris Management Brochure*

<http://www.fema.gov/rrrr/pa/dmgbroch.shtm>

### **What should I include in my debris management plan?**

**Mission.** Describe the purpose of the plan and what assumptions were used to develop the plan.

**Organization.** Develop a management structure for debris management operations. Identify who has overall responsibility for implementing the plan and supporting agencies, departments, and key staff.

**Responsibilities.** Assign individuals to fill positions identified in the organization and specific tasks to be implemented by those individuals. Identify specific responsibilities to be assumed by support agencies.

#### **Concept of Operations.**

Describe how the debris management plan will be implemented. Identify debris clearance priorities; establish who will perform debris clearance, removal and disposal operations; and identify debris management and disposal sites. Consider coordination within and between agencies and the use of mutual aid agreements or memoranda of understanding. Develop estimates of debris types and quantities. Identify how public information will be disseminated and coordinated. Consider how work performed will be documented. Sections may include Normal Operations, Heightened Readiness, Response, and Recovery.

**Appendices.** Include sample load tickets, forms, rights of entry and hold harmless agreements, and scopes of work. Also include call-down lists, site selection criteria, pre-identified management and disposal site locations, disposal site/landfill sizes and capacities, (environmental and historical) regulatory compliance requirements, permitting requirements, etc.

## **EXHIBIT A**

### **SCOPE OF WORK**

*(Exhibit A is strictly a sample and must be reviewed by local legal staff before use)*  
*(NOTE: Standardized City Procurement procedures will be adhered to on all RFPs)*

## 1.0 PROJECT DESCRIPTION AND REQUIREMENTS

- 1.1. This document constitutes a Request for Proposal (RFP) from \_\_\_\_\_ County for experienced firms to remove and lawfully dispose of disaster-generated debris (other than hazardous materials and household putrescible garbage) from public property and public rights-of-way, and to setup and operate TDSR sites at designated locations within \_\_\_\_\_ County immediately after a hurricane or other disaster.
- 1.2. The objective of the RFP and subsequent contracting activity is to secure the services of an experienced CONTRACTOR who is capable of efficiently removing large volumes of disaster-generated debris from a large area in a timely and cost-effective manner and lawfully disposing of all debris. The successful proposer (CONTRACTOR) must be capable of assembling, directing, and managing a work force that can complete the removal of approximately \_\_\_\_ million cubic yards of debris from any combination of unincorporated areas and/or incorporated municipalities as identified in this RFP within \_\_\_\_\_ County in a maximum of 90 calendar days and complete all disposal operations within 180 calendar days.
- 1.3. The contract will be for a five (5) year term, pending annual re-certification of the CONTRACTOR'S capabilities.
- 1.4. While intended to cover debris management needs in any major disaster scenario, the primary focus is on the threat of hurricane damage to \_\_\_\_\_ County. The planning standards used for this project are based on the anticipated impacts of a Category 4 "wet" hurricane. However, the management of debris created by all other types of man-made and natural disasters is also included within the scope of this contract.
- 1.5. This RFP pertains to the unincorporated areas of \_\_\_\_\_ County and the following municipalities (hereinafter referred to as AUTHORIZED AGENCIES):
  - \_\_\_\_\_
  - \_\_\_\_\_
- 1.6. The jurisdictional boundaries of these AUTHORIZED AGENCIES are shown in Exhibit \_\_\_\_ to Attachment A. \_\_\_\_\_ County will issue Task Orders based on requests from the municipalities identified as AUTHORIZED AGENCIES and for the unincorporated portions of the County. The Task Orders will apply only within the jurisdictional boundary of the initiated AUTHORIZED AGENCY or unincorporated portions of the County. Temporary Debris Staging and Reduction (TDSR) sites and landfills within neighboring jurisdictions shall not be presumed to be available for the CONTRACTOR'S use unless so specified within the task order.
- 1.7. \_\_\_\_\_ County will assign a Debris Manager (DM) and will establish and staff a Debris Management Center (DMC), which will provide overall coordination between the Debris Managers (DMs) of the above listed AUTHORIZED AGENCIES. The DMC and AUTHORIZED AGENCIES' DM, will be the primary point of contact for the CONTRACTOR and will resolve contract administration issues and disputes between jurisdictions using this contract.

## **2.0 BACKGROUND**

### **2.1. Introduction**

- 2.1.1. The \_\_\_\_\_ County Debris Management Plan includes considerations for removing and processing the volumes and types of debris expected to be generated by a major disaster such as hurricane and the procedures for disposing of that debris. The planning approach is formulated in part on the concept of strategic pre-positioning of plans and resources necessary for timely, coordinated recovery operations, including removal of debris from public property and right-of-ways throughout \_\_\_\_\_ County using a combination of county, municipal, and CONTRACTOR forces.
- 2.1.2. \_\_\_\_\_ County envisions the need for multiple contracts to carry out the debris removal and disposal work throughout \_\_\_\_\_ County based on a Category 4 “wet” hurricane. A basic assumption of this contract is that a CONTRACTOR who is capable of managing the debris and infrastructure damage associated with a Category 4 “wet” hurricane will also be capable of coping with the damage created by other types of man-made and natural disasters.
- 2.1.3. The CONTRACTOR must have the capacity to manage a major workforce with multiple subcontractors and to cover the expenses associated with a major recovery operation prior to the initial payment and between subsequent payments, as well as the capacity to provide the necessary bonds and insurance. The CONTRACTOR must also have an established management team, an established network of resources to provide the necessary equipment and personnel, comprehensive debris removal and volume reduction operations plans, and demonstrable experience in major disaster recovery projects.
- 2.1.4. The contract to be awarded under this RFP will be a contingency contract that will be activated only in the face of an emergency. As such, no compensation will accrue to the CONTRACTOR unless and until the contract is activated either in anticipation of a natural disaster or immediately after such disaster.
- 2.1.5. Potential CONTRACTORS are solely responsible for their own costs of developing the proposal associated with this RFP. In addition, a CONTRACTOR who receives a contingency contract for the work will be required to participate in certain \_\_\_\_\_ County directed disaster recovery training and/or exercises, 1 to 2 days each year, at no cost to \_\_\_\_\_ County.

### **2.2. Planning Standard for Debris Removal and Disposal**

- 2.2.1. \_\_\_\_\_ County has selected a Category \_\_\_\_\_ “wet” hurricane that impacts the entire County with equal intensity as its planning standard. The worst-case debris volume anticipated from such a storm impacting the entire \_\_\_\_\_ County area with equal intensity is approximately \_\_\_\_\_ million cubic yards. For purposes of preparing this contract, this estimated volume is also anticipated to adequately cover the worst-case situation for other types of man-made and natural disasters.
- 2.2.2. The volume of debris estimated for the AUTHORIZED AGENCIES and the unincorporated portions of the County are shown in Exhibit \_\_\_\_ to Attachment A. This estimated debris volume is a planning figure that was used in determining the maximum land area requirement for TDSR sites and other resource needs. It is not a fixed quantity

for the purpose of contractual obligations. The actual volume of debris may be greater than or less than \_\_\_\_\_ million cubic yards. For the purpose of this RFP and solely for the purpose of standardizing the contents of all submittals each CONTRACTOR shall use a planning figure of \_\_\_\_\_ million cubic yards of debris as the initial volume estimate for post disaster debris that could be assigned to that CONTRACTOR. (See Exhibit \_\_\_\_, Bid Schedule).

- 2.2.3. \_\_\_\_\_ County's goal is to use as many as \_\_\_\_\_ CONTRACTORS to complete the removal of debris within 90 calendar days and to complete all disposal and recycling operations within 180 calendar days. This assumes that the entire \_\_\_\_\_ County area will be accessible within that period. Due to the low elevation and potential for flooding, some areas might not be accessible for several days after a major natural disaster. The CONTRACTOR must be aware that it might not be possible to initiate operations in all parts of the area simultaneously immediately after a storm.
- 2.2.4. Recycling of debris by the CONTRACTOR is encouraged and will be coordinated with \_\_\_\_\_ County and the AUTHORIZED AGENCIES. Recycling efforts will also be carried out under the current recycling programs existing at most landfills. The strength or weakness of the various landfills' recycling programs will be a factor in choosing disposal locations.

### **2.3 Debris Management**

- 2.3.1. Planning for debris management operations is a function of \_\_\_\_\_ County Department of Emergency Management. The County's Debris Manager, in coordination with the AUTHORIZED AGENCIES, will direct the debris removal and disposal operations from the County Debris Management Center.
- 2.3.2. In addition to using AUTHORIZED AGENCIES forces and equipment, \_\_\_\_\_ County intends to execute \_\_\_\_\_ (but reserves the right to execute more or less than \_\_\_\_\_) debris removal and disposal contracts on a contingency basis for the purpose of having CONTRACTOR(S) immediately available and committed to assisting \_\_\_\_\_ County and the AUTHORIZED AGENCIES in the aftermath of a major disaster. Each CONTRACTOR holding a debris removal and disposal contract will serve as a General Contractor for the purpose of debris removal and disposal operations, and will be able to use his/her own and subcontractor resources to meet the obligations of the contract. It is anticipated that the CONTRACTOR will use both local and non-local subcontractors.
- 2.3.3. When a major disaster occurs or it is imminent, \_\_\_\_\_ County will contact the firm(s) holding Debris Removal and Disposal Contracts to advise them of \_\_\_\_\_ County's intent to activate the contracts. Debris removal will generally be limited to debris in, upon, or brought to public streets and roads, rights-of-way, municipal properties and facilities, and other public sites. The CONTRACTOR will be responsible for determining the method and manner of debris removal and lawful disposal operations, consistent with this Scope of Work. Disposal of debris will be at County approved landfill sites. The CONTRACTOR will be responsible for the lawful disposal of all debris and debris-reduction by-products generated at all TDSR sites. The term temporary debris management site is frequently used in the business of debris management. For purposes of this contract the terms TDSR site and temporary debris management site are considered to be synonymous.

- 2.3.4. When a major disaster occurs or is imminent, \_\_\_\_\_ County will initially send out an Alert to the selected CONTRACTOR(S). This Alert will serve to activate the lines of communication between the CONTRACTOR representatives and \_\_\_\_\_ County and may require the CONTRACTOR to send an Operations Manager to \_\_\_\_\_ County within 24 hours to begin planning for operations and mobilization. Subsequently, \_\_\_\_\_ County will issue the first Task Order, which will authorize the CONTRACTOR to begin mobilizing the personnel and equipment as necessary to perform the stipulated work. This first Task Order will also direct the CONTRACTOR to execute the required Performance and Payment Bonds. The CONTRACTOR should anticipate receiving this first Task Order from \_\_\_\_\_ County within the first 24 hours following landfall of a hurricane or occurrence of other disaster. Additional task orders will be issued for those AUTHORIZED AGENCIES, indicated in a \_\_\_\_\_ County task order, for the debris removal, reduction, and disposal, within the boundaries of the AUTHORIZED AGENCIES or the County. Contractor invoices for services performed under the first and subsequent task orders, should be presented for payment to the County. The CONTRACTOR shall provide an Operations Supervisor for each AUTHORIZED AGENCY that requests a task order for services. This Operations Supervisor will coordinate all activities of the CONTRACTOR within the boundaries of the AUTHORIZED AGENCY and with the AUTHORIZED AGENCY'S staff.
- 2.3.5. The general concept of debris removal operations includes multiple, scheduled passes of each site, location, or right-of-way. This will allow residents to return to their properties and bring debris to the right-of-way as recovery progresses. \_\_\_\_\_ County or the AUTHORIZED AGENCIES will prescribe the specific schedule to be used after ascertaining the scope and nature of the disaster's impacts. The CONTRACTOR can assume the scope and schedule for debris removal, as prescribed by \_\_\_\_\_ County and/or the AUTHORIZED AGENCIES, will be consistent with the description of critical facilities and route clearing priorities based on an assessment of the disaster.
- 2.3.6. TDSR sites will be as identified for the temporary staging and reduction of vegetative and woody debris only. \_\_\_\_\_ County or the AUTHORIZED AGENCIES will identify additional TDSR sites as needed.
- 2.3.7. The CONTRACTOR will operate the TDSR sites and only CONTRACTOR vehicles and others specifically authorized by \_\_\_\_\_ County will be allowed to use the sites. The locations of publicly owned sites currently identified are shown in Exhibit \_\_\_\_\_ to Attachment A. Additional sites may become available as plans develop.
- 2.3.8. \_\_\_\_\_ County and the AUTHORIZED AGENCIES may also establish designated homeowner drop-off sites. The CONTRACTOR will be responsible for removing all debris from those sites daily.
- 2.3.9. Curbside segregation of debris and disaster-generated or related wastes will be an element of \_\_\_\_\_ County's disaster recovery program. The debris removal and disposal CONTRACTOR will be required to aid in the segregation and waste stream management processes. Waste and debris from hurricanes, and other major storm events, will be classified into the following six categories with responsibility as shown:
- Household trash and putrescible garbage – continued responsibility of County/City Solid Waste Collection forces and associated CONTRACTORS.

- Leaves and lawn litter, placed in clear plastic bags, placed by curb or shoulder of road – CONTRACTOR responsibility for removal and disposal. CONTRACTOR will decide, with concurrence by \_\_\_\_\_ County and the AUTHORIZED AGENCIES, whether plastic bags are to be co-mingled with the loose vegetative debris or are to be collected separately to facilitate recycling.
- Vegetative and clean, woody debris, suitable for chipping, grinding or burning, loosely stacked, placed by curb or road shoulder, This includes logs, stumps, rootballs, limbs, branches, and complete trees that may be removed and placed by the curb or road shoulder for collection. Any reduction of size of woody debris to make suitable for chipping, grinding or burning is part of the CONTRACTORS responsibility. – CONTRACTOR responsibility for removal and disposal.
- Construction and demolition (C&D) debris, furniture, furnishings, appliances, etc. suitable for being landfilled or recycled, stacked by curb or shoulder – CONTRACTOR responsibility for removal and disposal.
- Household Hazardous Waste (HHW), separated from all other types of waste and debris, placed at curb or road shoulder – \_\_\_\_\_ County and/or AUTHORIZED AGENCIES responsibility for removal.

***The above categories of responsibility include the opportunity for ownership, pending negotiations, and upon collection and removal this debris may be available for recycling and sale by the responsible CONTRACTOR.***

2.3.10. Citizens will be advised to separate all waste and debris, to the extent practicable, into the above categories. Failure by the citizens to perform this separation does not relieve the CONTRACTOR of his/her curbside separation responsibilities, to the extent practicable.

2.3.11. Any Household Hazardous Waste (HHW) encountered by the debris removal CONTRACTOR is to be set aside. HHW disposal will be the responsibility of \_\_\_\_\_ County and the AUTHORIZED AGENCIES. \_\_\_\_\_ County will designate HHW drop-off locations for use by residents. The following items are considered HHW for the purpose of this contract:

- Cleaning Products
- Batteries
- Workshop/Painting Supplies
- Aerosol spray cans
- Indoor Pesticides
- Lawn and Garden Products
- Automotive Products
- Fluorescent light bulbs
- Propane tanks and other compressed gas cylinders
- Flammable Products
- Home/Office Electronics – computers, TV's, monitors, lithium, and cadmium batteries

- 2.3.12. The CONTRACTOR will set up a lined containment area and separate any HHW inadvertently delivered to a TDSR site.
- 2.3.13. Commercial and industrial hazardous waste such as chemicals, gas containers, transformers, and any other form of hazardous or toxic matter will be set aside for collection and disposal by a Hazardous Materials Removal and Disposal Contractor who will be selected by \_\_\_\_\_ County or the AUTHORIZED AGENCIES.
- 2.3.14. The responsibility for management of debris created by other man-made and natural disasters will be the same as for hurricanes, however, the quantities and the mixture of debris categories could be substantially changed.

### **3.0. SCOPE OF WORK**

#### **3.1. Overview**

- 3.1.1. The scope of work for this RFP is divided into three (3) parts. Part 1 is for Debris Removal and Disposal Operations. Part 2 is for TDSR site Operations. Part 3 is Debris clearance for access from rights-of-way and public property.
- 3.1.2. Specific work authorizations by \_\_\_\_\_ County will be through written Task Orders. Task Orders will define the job to be accomplished, location of job, time frame for completion, rates to be used, etc. Other disaster response and recovery work may be added, such as screening sand for beach replenishment, and any requirements or rates not covered by this Proposal will be negotiated. \_\_\_\_\_ County reserves the right to extend operations on a weekly basis.
- 3.1.3. The CONTRACTOR shall commence mobilization immediately upon receipt of the mobilization Task Order, meeting the following progress patterns: **36** hours- 25%, **72** hours- 50%, **96** hours- 75%, and **120** hours- 100% unless otherwise negotiated. This represents a minimum response schedule and does not restrict an earlier response. Subsequently, \_\_\_\_\_ County may issue additional Task Orders to define more precisely the work to be accomplished or to authorize additional work. The CONTRACTOR shall perform in accordance with each Task Order for those Municipalities established by \_\_\_\_\_ County as AUTHORIZED AGENCIES. Each Task Order will be uniquely and sequentially numbered.

***The CONTRACTOR shall be knowledgeable on the rules and regulations governing the transport of heavy equipment and oversized loads across state boundaries. An emergency situation in \_\_\_\_\_ County, \_\_\_\_\_ does not assure any waiver of regulations or assistance in expediting equipment transportation by other states.***

- 3.1.4. The CONTRACTOR must be duly licensed to perform the work in accordance with the State of \_\_\_\_\_ code requirements. The CONTRACTOR shall obtain all permits necessary to complete the work. The CONTRACTOR shall be responsible for determining what additional permits are necessary to perform under the contract, but at the minimum must hold a business license and CONTRACTOR's license from each AUTHORIZED AGENCY where services are performed. Copies of all permits shall be submitted to the \_\_\_\_\_ County Debris Manager as soon as available.

- 3.1.5. The quantity of work required to complete this contract is estimated. The actual effort required may be more or less than the estimated amount shown in the Price Proposal Form (Exhibit B). Payment will be made at the unit rates proposed by the CONTRACTOR. The output will be verified by \_\_\_\_\_ County and/or the AUTHORIZED AGENCIES in the daily operational report. Should hourly rates be used to pay for certain equipment, then preventative maintenance not in excess of fifteen (15) minutes in a normal workday will be paid at the regular hourly rate. Preventative maintenance or down time resulting from equipment failure, routine maintenance and fueling that exceeds fifteen (15) minutes will be considered unacceptable work and non-payment of that time will be rounded off to the half hour of all hours where delays occur. Preventative maintenance is defined as the usual field maintenance to keep equipment in operating condition without the use of extensive shop equipment. Fueling of equipment will be considered as part of preventative maintenance.
- 3.1.6. The CONTRACTOR shall be responsible for correcting any notices of violations issued as a result of the CONTRACTOR'S or any subCONTRACTOR's actions or operations during the performance of this contract. Corrections for any such violations shall be at no additional cost to \_\_\_\_\_ County and/or the AUTHORIZED AGENCIES.
- 3.1.7. The CONTRACTOR shall conduct the work so as not to interfere with the disaster response and recovery activities of federal, state or local governments or agencies, or of any public utilities or other private CONTRACTOR.

<p><i>The CONTRACTOR shall ensure that wherever non-English speaking crews are utilized, at least one crew supervisor must be fluent in English.</i></p>
----------------------------------------------------------------------------------------------------------------------------------------------------------

### **3.2. Part 1 – Debris Removal and Disposal Operations**

- 3.2.1. The purpose of Part 1 of this scope of work is to define the requirements for debris removal and disposal operations after any catastrophic disaster within the \_\_\_\_\_ County area.
- 3.2.2. The CONTRACTOR shall provide equipment, operators and laborers for debris removal operations. The CONTRACTOR shall provide all labor and materials necessary to fully operate and maintain (including fuel, oil, grease, and repairs) all equipment under this contract.
- 3.2.3. All rates are to be fully costed, inclusive of the cost of protective clothing (to include hardhats and steel-toed boots), fringe benefits, hand tools, supervision, transportation, traffic control and any other costs.
- 3.2.4. The work shall consist of clearing and removing disaster generated debris as directed by \_\_\_\_\_ County and/or the AUTHORIZED AGENCIES. During the course of this contract, and once operations have commenced, the CONTRACTOR shall not relocate any equipment or labor assets, including subCONTRACTORS, from one AUTHORIZED AGENCY to another without giving 24 hours advanced notice of the intended relocation to both AUTHORIZED AGENCIES. In addition to this requirement for advanced notice, the CONTRACTOR will complete all debris clearing, loading and hauling operations that have been started on any particular pass through a neighborhood.

- 3.2.5. The debris, once loaded and removed from the public rights-of-way or other public property, shall become the property of the CONTRACTOR, unless otherwise negotiated by the \_\_\_\_\_ County. \_\_\_\_\_ County or the AUTHORIZED AGENCIES will provide TDSR sites, to the extent they are available, for the CONTRACTOR'S use in volume reduction efforts and recycling programs.

Work may include:

- Clearing debris from public rights-of-way and public property, if authorized.
  - Constructing TDSR sites, as required, at locations selected or approved by the County or AUTHORIZED AGENCIES.
  - Loading and hauling debris from public rights-of-way and public property to TDSR sites, or authorized disposal facilities, and dumping.
  - Managing and operating the TDSR sites and loading debris reduction by-products for hauling and disposal.
  - Performing debris by-product recycling programs, as negotiated and approved by the County.
  - Hauling non-recycled debris and debris reduction by-products to an authorized disposal facility.
  - Providing traffic control during debris loading operations on public rights-of-way.
- 3.2.6. The County will be responsible for all tipping fees at the authorized landfill. Debris delivered to a TDSR site will be paid based on the price per cubic yard for unreduced debris and the distance hauled according to Items 1.1 through 1.4 of Part A of the Price Proposal Form (Exhibit B).

### **3.3. TDSR Sites**

- 3.3.1. The CONTRACTOR shall use only TDSR sites designated by \_\_\_\_\_ County and/or AUTHORIZED AGENCIES Debris Managers. The CONTRACTOR shall not assume that TDSR sites and landfills, located outside of the jurisdictional boundaries of the agency initiating a task order, are available to the CONTRACTOR unless so specified in the task order.
- 3.3.2. The TDSR site foreman is appointed by the CONTRACTOR and shall direct all dumping operations and will coordinate removal of debris, and reduction by-products to \_\_\_\_\_ County authorized landfill locations for subsequent disposal, or to recycling processors selected by the CONTRACTOR and approved by \_\_\_\_\_ County.

### **3.4. Equipment**

- 3.4.1. All trucks, trailers and equipment must be in compliance with all applicable federal, state, and local rules and regulations. Trucks and trailers used to haul debris must be capable of rapidly dumping their load without the assistance of other equipment, be equipped with a tailgate that will effectively contain the debris during transport and that will permit the trucks to be filled to capacity. Cyclone fence may be used as temporary tailgates if they comply with the following specifications:

- Fencing must be permanently attached to one side of the truck bed.
  - After loading, the fencing must be tied to the other side of the truck bed at two places with heavy gauge wire.
  - Fencing must extend to the bottom of the bed.
  - After loading, bottom of fencing shall be tight against the bed of the truck and secured at a minimum of two locations.
  - Solid iron metal bars must be secured to both sides of the fencing.
- 3.4.2. All trucks and trailers must be suitable for equipment loading. The County Debris Manager desires that the CONTRACTOR maximize the use of self-loading trucks equipped with grapples or loaders with grapple attachments to reduce potential collateral damage and to expedite the cleanup operation. **Hand loading of trucks or trailers must be approved in writing by the County Debris Manager before being put into operation.** Trucks that do not comply with these conditions may be approved for use, depending upon the needs of \_\_\_\_\_ County, but a deduction will be made to the measured maximum volume to account for reduced compaction capability and inefficiency of operation. County monitors located at temporary or final debris disposal sites will reduce the observed capacity of each **hand-loaded trailer or truck** load by 50% because of the low compaction achieved by hand loading. For example, if a 40 cubic-yard (CY) hand-loaded truck or trailer arrives at the debris management or disposal site, and it appears to be 100 percent full, the actual quantity of debris in the trailer will be recorded as: 20 CY  $\{(40 \text{ CY} / 2) * 100\}$ . In the same manner, if the truck or trailer appears half full, the load will be recorded as: 10 CY  $\{(40 \text{ CY} / 2) * 50\}$ . The maximum amount recorded for a hand-loaded vehicle will be 50% of its measured capacity.
- 3.4.3. The CONTRACTOR shall submit to \_\_\_\_\_ County certifications indicating the type of vehicle, make and model, license plate number, equipment number, and measured maximum volume, in cubic yards, of the load bed of each piece of equipment utilized to haul debris. The measured volume of each piece of equipment shall be calculated from actual internal physical measurement performed by the CONTRACTOR and a \_\_\_\_\_ County representative. Maximum volumes may be rounded to the nearest cubic yard. The reported measured maximum volume of any load bed shall be the same as shown on the signs fixed to each piece of equipment. \_\_\_\_\_ County reserves the right to re-measure trucks at any time to verify reported capacity.
- 3.4.4. All trucks and trailers utilized in hauling debris shall be equipped with a tailgate that will permit the vehicle to be loaded to capacity and effectively contain the debris on the vehicle while hauling. **Sideboards, if installed, must be constructed of 2" x 6" boards or greater and may not extend more than 2-feet above the metal bedsides.** Once installed all sideboard extensions must remain in place throughout the operation, or the vehicle must be re-measured and remarked. All extensions to the bed, and any exceptions to the above requirements, such as  $\frac{3}{4}$ " minimum plywood, must be approved in writing by the County Debris Manager.
- 3.4.5. Trucks or equipment that are designated for use under this contract shall not be used for any other work. The CONTRACTOR shall not solicit work from private citizens or others to be performed in the designated AUTHORIZED AGENCY or County during the period of this contract. Under no circumstance will the CONTRACTOR mix debris hauled for others with debris hauled under this contract. Neither will the CONTRACTOR

mix debris being hauled for different AUTHORIZED AGENCIES prior to delivery to a TDSR site.

### **3.5. Securing Debris**

- 3.5.1. The CONTRACTOR shall be responsible for properly and adequately securing debris on each piece of equipment utilized to haul debris. Prior to leaving the loading site, the CONTRACTOR shall ensure that each load is secure and trimmed so that no debris extends horizontally beyond the bed of the equipment in any direction. All loose debris shall be reasonably compacted during loading and secured during transport. Tarps or other coverings shall be provided by the CONTRACTOR to prevent reduction by-products and other materials from being blown from the bed during hauls to disposal landfills.
- 3.5.2. The overall maximum height of hauling equipment, including sideboards and debris, shall be no greater than 13 feet 6 inches, or as approved by the County. The 13 feet 6 inch height restriction is intended to ensure that vertically protruding debris or equipment does not snag traffic signals, conductors, and support wiring. The CONTRACTOR must also verify the clearance of bridges and overpasses on all routes to be used, however, any such structure, with clearance less than 13 feet 6 inches, should be placarded showing the reduced clearance. Maximum width of a truck should be no greater than 8'6" wide. The CONTRACTOR is not relieved of the responsibility for verifying clearance for all overhead structures and wires.

### **3.6. Equipment Signage**

- 3.6.1. Prior to commencing operations, the CONTRACTOR shall affix to each piece of equipment, signs or markings indicating the Owner Operator's name and a unique equipment identification number. One sign shall be placed on each side of the equipment. For those trucks, trailers and other equipment intended to haul debris, the maximum volume, in cubic yards, of the load bed shall also be shown. Signs shall be maintained in an easily readable fashion for the duration of the work. Minimum letter size shall be 3" in height.

### **3.7. Other Considerations**

- 3.7.1. The CONTRACTOR shall assign and provide an Operations Manager (OM) to \_\_\_\_\_ County's Debris Management Center to serve as the principal liaison between the \_\_\_\_\_ County Debris Manager and the CONTRACTOR'S forces. The assigned OM must be knowledgeable of all facts of the CONTRACTOR'S operations and have authority in writing to commit the CONTRACTOR. The OM shall be on call 24 hours per day, seven days per week and shall have electronic linkage capability for transmitting and receiving relevant contractual information and make arrangement for on site accommodations. This linkage shall provide immediate contact via cell phone, Fax machine, and have Internet capabilities. The OM will participate in daily meetings and disaster exercises, functioning as a source to provide essential element information. The OM will report to the \_\_\_\_\_ County Debris Manager. This position will not require constant presence; rather the OM will be required to be physically capable of responding to the \_\_\_\_\_ County Debris Manager within one hour of notification.

- 3.7.2. In like manner, the CONTRACTOR'S Operations Manager shall assign and provide an Operations Supervisor for each AUTHORIZED AGENCY that is identified in a County Task Order. These subordinate operations supervisors are responsible to the CONTRACTOR'S Operations Manager and serve as the CONTRACTOR'S day-to-day point of contact and representative with the AUTHORIZED AGENCY. Depending upon the magnitude and complexity of the debris removal operations, it may be permissible to allow an individual Operations Supervisor to represent the CONTRACTOR and his/her Operations Manager with more than one AUTHORIZED AGENCY. Multiple assignments for Operations Supervisors require County approval.
- 3.7.3. The CONTRACTOR shall be responsible for control of pedestrian and vehicular traffic in the work area. At a minimum, one flag person should be posted at each approach to the work area.
- 3.7.4. The CONTRACTOR shall supervise and direct the work, using skilled labor and proper equipment for all tasks. Safety of the CONTRACTOR'S personnel and equipment is the responsibility of the CONTRACTOR. Additionally, the CONTRACTOR shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of this contract.
- 3.7.5. Payment for debris hauled will be based on the quantity of debris hauled in truck/trailer measured cubic yards and the distance hauled depending on where the debris is taken. Debris hauled to a TDSR site will require a validated load ticket. Drivers will be given load tickets at the loading site by a County loading site monitor. The quantity of debris hauled will be estimated in cubic yards at the TDSR site by a County TDSR site (Disposal) monitor. The estimated quantity will be recorded on the load ticket. The County TDSR site monitor will retain one copy of the load ticket and the driver will retain two copies of the load ticket. Debris being hauled to a permanent landfill will be paid based on cubic yards and the distance hauled recorded on an approved load ticket. Payment will be made against the CONTRACTOR'S invoice once site monitor and CONTRACTOR load tickets and/or scale tickets match. A sample debris load ticket is provided by Exhibit \_\_\_\_ of Attachment A. The load ticket will include an original and four copies.
- 3.7.6. The County and/or AUTHORIZED AGENCY TDSR site monitors and the disposal facility monitors will use their best judgement in estimating the quantity of debris in the trucks. For purposes of this contract the County and/or AUTHORIZED AGENCY monitors are the final authority. Trucks are assumed to be carrying 100% full loads, but deductions will be made for: consolidation during hauling, lightly packed loads with excessive air voids, and voids caused by incomplete loading at the loading site.

### **3.8. Part 2 – TDSR Site Operations**

- 3.8.1. The purpose of Part 2 of this scope of work is to define the requirements for TDSR site Operations after any catastrophic disaster within \_\_\_\_\_ County.
- 3.8.2. The scope of work for TDSR site Operations consists of two phases.
- 3.8.3. Phase I. The first phase includes site setup/preparation and site closeout/restoration and shall be compensated on a time and materials basis in accordance with the hourly rates provided in the Price Proposal Form, Part B (Exhibit B). Site

setup/preparation/closeout/restoration includes: clearing, stripping, hauling, fill placement, constructing/deconstructing processing pads, limerick or crushed concrete access roads, sodding, and any other similar activity necessary to make the site usable for its intended purposes and to return the site to its original condition. Do not include any materials in calculating the hourly rates in Price Proposal Form, Part B. Materials required for set/preparation and closeout/restoration shall be paid at cost or as negotiated during the issuance of the Task Order.

- 3.8.4. Additional guidance on the procedures for TDSR site setup, operation and close out are provided in Exhibit \_\_\_\_ to Attachment A. This exhibit includes subsections regarding:
- TDSR site Setup, Operation and Close Out Guidelines
  - Burning and Grinding Operations
  - Environmental Checklist for Air Curtain Pit Burners
  - Land Application of Wood Ash
  - Spontaneous Combustion in Mulch Piles
  - Closure and Restoration of TDSR sites
- 3.8.5. Phase II consists of TDSR site operations and material processing and shall be compensated in accordance with the unit prices provided in the Price Proposal Form, Part A. (Exhibit B).
- 3.8.6. The CONTRACTOR shall provide equipment, operators, and laborers for TDSR site operations as specified by Task Order. Unit prices provided in the Price Proposal Form, Part A, shall include all labor and materials necessary to fully operate and maintain (including fuel, oil, grease, repairs, operator, mobilization, demobilization, overhead, profit, and insurance) all equipment under this contract.
- 3.8.7. For work performed on a Time and Materials basis, all hourly equipment rates shall include the cost of the maintenance, fuel, repairs, overhead, profit, insurance, and any other costs associated with the equipment including labor and operator unless costs identified separately in the Task Order.
- 3.8.8. All rates shall include the cost of protective clothing (to include hardhats and steel-toed boots), fringe benefits, hand tools, supervision, transportation, and any other costs.
- 3.8.9. The work shall consist of managing the operations of a TDSR site and performing debris reduction by air curtain incineration and or grinding of storm generated debris as directed by the \_\_\_\_\_ County Debris Manager, and/or recycling of marketable material by the CONTRACTOR.
- 3.8.10. The County plans to use only vegetative TDSR sites that will be devoted to the reduction of clean woody debris by either burning or grinding, if the disaster is related to a hurricane or other major storm event.
- 3.8.11. Mixed debris and Construction & Demolition (C&D) debris will be hauled directly to a County identified temporary transfer point or authorized landfills. All currently authorized landfills are shown in Exhibit \_\_\_\_ to Attachment A. Additional landfills may be identified as work progresses.

- 3.8.12. The establishment of C&D TDSR sites, to operate as transfer points, will be authorized if the situation involves other types of man-made or natural disasters with greater volumes of C&D debris.
- 3.8.13. Material coming into the Vegetative TDSR sites will be measured and paid for by the in bound, truck measured, cubic yard according to the Price Proposal Form, Part A.
- 3.8.14. Locations of all TDSR sites will be provided by the County and currently identified sites are shown in Exhibit \_\_\_\_ to Attachment A. The County Debris Manager must approve site improvements before work begins and any costs, other than those in the Price Proposal Form, that might have been negotiated under a Task Order shall be documented for payment.
- 3.8.15. When performing a Task Order using Part B Hourly Prices the CONTRACTOR shall submit a report to the County Debris Manager by 11:00 a.m. each business day, for the previous day's work for the term of the Task Order. A sample Task Order is provided by Exhibit \_\_\_\_ to Attachment A. Each report shall contain, at a minimum, the following information:
- Contractor's Name
  - Contract Number
  - Task Order Number
  - Daily and cumulative hours for each piece of equipment, if appropriate.
  - Daily and cumulative hours for personnel, by position, if appropriate.
  - Volumes of debris handled
  - Volume of debris recycled
- 3.8.16. Failure to provide audit quality information will subject CONTRACTOR to non-payment in each instance at the sole discretion of the County.
- 3.8.17. The CONTRACTOR shall supervise and direct the work, using skilled labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the CONTRACTOR. Additionally, the CONTRACTOR shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of this contract.
- 3.8.18. The CONTRACTOR shall be responsible for control of pedestrian and vehicular traffic in the work area.
- 3.8.19. The County will not provide to the Contractor(s) potable water, sewage treatment, fuel, electricity, other utilities, or other personnel, materials or equipment deemed necessary to operate the vegetative debris volume reduction or temporary C&D debris staging site(s).
- 3.8.20. The Contractor(s) shall provide utility clearances and sanitation facilities, if needed. The Contractor(s) shall protect existing infrastructure at the sites and repair any damage caused by his operations at no additional cost.

- 3.8.21. The Contractor(s) shall be responsible for installing site security measures and maintaining security for operations at the site.
- 3.8.22. The Contractor(s) shall manage the site to minimize the risk of fire.
- 3.8.23 The Contractor(s) shall be responsible for the closure of the TDSR site(s) within 30 calendar days of receiving the last load of disaster-related debris. This closure shall include removal of site equipment, debris, and all remnants from the processing/staging operation (such as temporary toilets, observation towers, security fence, etc.), and grading the site, and restoring the site to pre-work conditions. The site will be restored in accordance with all local requirements. The Contractor(s) is responsible for the proper disposal of non-burnable and unprocessed debris and wood chips. Disposal of the hazardous waste debris and home/office electronic devices is not the responsibility of the Contractor(s) under this contract. The disposal of hazardous waste debris and home/office electronic devices is to be coordinated through the County Debris Management Center. The Contractor(s) shall receive approval from the County Debris Manager as to the final acceptance of a site closure. Final payment shall be released to the Contractor(s) upon acceptance of the site by the County Debris Manager.

### **3.9. Part 3 – Debris Clearance (for access) from Rights-of-Way and Public Property**

- 3.9.1. The County provides debris management, including the clearance (moving debris from the middle of the road, etc.) of debris from rights-of-way and public property. The County and AUTHORIZED AGENCIES intend to perform debris clearance for access with their own forces or under existing contractual agreements between the AUTHORIZED AGENCIES and local firms. However, in a significant disaster, these resources may be insufficient to perform the clearance activities in a timely manner.
- 3.9.2. This debris clearance is to be considered a supplemental service. It is anticipated that debris clearance activities would be conducted, if needed, on a time and material basis with a limit of 70 hours using the rates in the Price Proposal Form, Part B.

## **4.0 MISCELLANEOUS REQUIREMENTS**

### **4.1. TDSR Site Foreman**

- 4.1.1. The TDSR site foreman, provided by the CONTRACTOR, is responsible for management of all operations of the site to include, traffic control, dumping operations, segregation of debris, burning, grinding, and safety. The TDSR site foreman will coordinate directly with the County's/ AUTHORIZED AGENCY'S site monitor.
- 4.1.2. The TDSR site foreman will be responsible for documenting equipment and labor time, quantities of debris received, processed materials hauled away, and providing the daily operational report to the CONTRACTOR'S Operations Manager, for further delivery to the County's Debris Manager.

### **4.2. TDSR Site Night Foreman**

- 4.2.1. The TDSR site night foreman, provided by the CONTRACTOR, is responsible for managing all night operations approved by the County/AUTHORIZED AGENCIES that

will be limited primarily to burning. Coordination with the County's/AUTHORIZED AGENCY'S site monitor is required.

- 4.2.2. The TDSR site night foreman will be responsible for documenting equipment and labor time, quantities of materials processed, and providing the daily operational report to the CONTRACTOR'S Operations Manager, for further delivery to the County's Debris Manager.

#### **4.3. TDSR Site Management Plan**

- 4.3.1. Once the TDSR site is identified by the County/AUTHORIZED AGENCY, the CONTRACTOR will provide a TDSR Site Management Plan.

- 4.3.2. Three (3) copies of the plan are required. The plan shall be drawn to a scale of 1" = 50' and address following functions:

- **Access to site**
  - Site preparation – clearing, erosion, and grading
  - Traffic control procedures
  - Safety
  - Segregation of debris
  - Location of ash disposal area, hazardous material containment area, CONTRACTOR work, area, and inspection tower
  - Location of incineration operations and grinding operations (if required). Burning operations require a 200-foot clearance from the stockpile and 500-foot clearance from structures, roadways or wooded areas.
  - Location of existing structures or sensitive areas requiring protection.

#### **4.4. Inspection Tower**

- 4.4.1. The CONTRACTOR shall construct an inspection tower at each TDSR site. The floor elevation of the tower shall be 10-feet above the existing ground elevation. The floor area shall be a minimum 8' by 8', constructed of 2" x 8" joists, 16" O.C. with ¾" plywood supported by a minimum of four 6" x 6" posts. A 4-foot high wall constructed of 2" x 4" studs and ½" plywood shall protect the perimeter of the floor area. The floor area shall be covered with a roof. The roof shall provide a minimum of 6' – 6" of headroom below the support beams. Steps with a handrail shall provide access to the tower. Tower will be anchored to the ground to prevent blow-over. Construction alternatives may be authorized by the County Debris Manager but will, as a minimum, provide the same dimensions and safety considerations.
- 4.4.2. The TDSR site, including the inspection tower, will be periodically inspected for compliance with FEMA and OSHA safety criteria. Applicable Site Applicant/Contractor Safety Audit Form is attached as Exhibit \_\_\_\_.

#### **4.5. Household Hazardous Waste Containment Area**

- 4.5.1. The CONTRACTOR shall construct a hazardous material containment area at each TDSR site. This area shall be 30' x 30'. The perimeter shall be lined with hay bales and staked in place. The area shall be lined with a heavy gage plastic to provide a waterproof

barrier. A six-inch layer of sand will be added as an absorbent and to protect plastic from puncture or tear. Additional plastic sufficient to cover the area is required to prevent rain from entering the containment area. Site run-off must be redirected from the containment area by site grading.

#### **4.6. Private Property Access**

- 4.6.1. The CONTRACTOR is not authorized to perform work on private property and shall not seek or accept requests from private property owners to perform debris clearing or removal activities. Under certain circumstances it may benefit all parties to the contract to obtain access to private property, or permission to cross private property, for the purpose of clearing and removing debris from public property or rights-of-way. For such situations a sample Right of Entry Agreement Form is provided as Exhibit \_\_\_\_ to Attachment A. If circumstances make removal of debris from private property necessary or beneficial to the County or the AUTHORIZED AGENCIES, a change to the scope of work will be negotiated.

#### **4.7. Recycling Program**

- 4.7.1. \_\_\_\_\_ County will consider the recycling programs that are in use at the available landfills, in the process of assigning the CONTRACTORS to use specific disposal locations. Recycling of construction and demolition (C&D) debris, through material salvage, and recycling of clean, woody debris by mulching and composting is within the County's Solid Waste mission and will be pursued to the extent practicable.
- 4.7.2. Recycling of debris removed by the CONTRACTOR is encouraged. The CONTRACTOR may be able to assume ownership of the debris upon collection and removal from rights-of-way or public property. Debris ownership will be the subject of negotiation with the County. Ownership of the debris may be transferred to the CONTRACTOR in whole or in part, and in either case, the following conditions will apply:
1. The TDSR sites may be available for use by the CONTRACTOR in the recycling efforts. However, the availability and environmental permitting will not be extended for TDSR sites beyond that required for normal debris reduction and disposal activities.
  2. The sale of marketable timber, chips, mulch and other recyclable materials is authorized.
  3. The share of the profits to be retained by the CONTRACTOR will be determined by the above negotiations.
  4. Appropriate reductions to the Part A Quantities for TDSR site operations and for disposal site hauling will be negotiated with the County for all services not performed.
  5. The overall cost to the County will not be increased as a result of the CONTRACTOR'S recycling program, and some decrease is anticipated and will be the subject of negotiations.

**4.8. Debris Collection Efficiency/Cleanliness**

- 4.8.1. The CONTRACTOR is responsible for collecting and removing, from public rights-of-way and public property, all debris that exceeds in size, weight, volume, or shape that which can reasonably be collected by the average homeowner using a rake, broom, shovel and plastic bags. Homeowners are responsible for collecting the small residual quantities of leaves, dirt, sawdust, twigs and similar small items of debris that can be readily put into plastic bags. Except for the above, the CONTRACTOR will collect and remove all debris existing on a street during each pass and not leave any debris for subsequent passes. This does not preclude the CONTRACTOR from using separate vehicles and crews to: separate plastic bags from other vegetative debris; collecting C&D debris; collecting recyclable timber or from hauling stumps with rootballs. The CONTRACTOR will organize his equipment and crews so that all types of debris are collected within any one pass.

**4.9. Damages to Public or Private Property**

- 4.9.1 The CONTRACTOR shall be responsible for any damage to private or public property that results from his debris collection and removal activities. Disagreements will be settled through negotiations. Repair of damaged areas will be performed immediately. The effected area or item will be restored to equal or better than its original condition. The CONTRACTOR shall supply the County with semi-weekly lists showing all damage claims that have been settled and all claim issues that remain outstanding.

**4.10. Debris Removal from Drainage Systems**

- 4.10.1. The CONTRACTOR may be required to clear debris from various ditches, canals, streams, lakes, reservoirs, structures and other drainage system components. This clearing may require either hauling or disposal on site, as directed by the County Debris Manager. The County will develop a scope of work for each system component including: description of debris to be removed including sizes and numbers of trees, locations, photographs, access points and similar information. The CONTRACTOR will submit lump sum cost estimates for each location with unit pricing taken from Part B of the Price Proposal Form.

**4.11. Tree and Limb Removal with Specialized Equipment**

- 4.11.1. The CONTRACTOR may be required to remove hazardous hanging limbs and branches that have not completely fallen to the ground and hazardous leaning or damaged trees that are still standing. The determination of the existence of a hazardous situation is the responsibility of the County Debris Manager and direction to proceed and pricing will be handled in a similar manner as Debris Removal from Drainage Systems. The County Debris Manager will provide a detailed description of the trees or limbs to be removed and the CONTRACTOR will provide a lump sum cost estimate based upon unit prices from Item 2.2 of Part A of the Price Proposal Form. Any deviation from these unit prices will be the subject of negotiations.

**4.12. Removal of Hazardous Stumps**

- 4.12.1. The CONTRACTOR may be required to remove hazardous stumps that have not been fully uprooted. The determination of the existence of a hazardous situation is the

responsibility of the County Debris Manager. Direction to proceed and pricing will be handled similar to Debris Removal from Drainage Systems and Tree & Limb Removal. The County Debris Manager will provide a detailed description of the stumps to be removed and the CONTRACTOR will provide a lump sum cost estimate based upon the unit prices from Item 2.1 of Part A of the Price Proposal Form. Any deviation from these unit prices will be the subject of negotiations. The loading, hauling and dumping of these stumps, as well as of stumps and rootballs that are already uprooted (not requiring extensive digging or grinding) shall be paid under Items 1.1 through 1.4, as appropriate.

## **5.0 ADDITIONAL CONSIDERATIONS**

5.1. The County Debris Manager shall have the right to terminate a contract or a part thereof before the work is completed in the event:

- 5.1.1. Previous unknown circumstances arise making it desirable in the public interest to void the contract.
- 5.1.2. The Contractor(s) is not adequately complying with the specifications.
- 5.1.3. Proper techniques are not being followed after warning notification by the County Debris Management Center.
- 5.1.4. The Contractor(s) refuses, neglects, or fails to supply properly trained or skilled supervisory personnel or workers or proper equipment of the specified quality and quantity.
- 5.1.5. The Contractor(s), in the judgment of the County Debris Management Center is unnecessarily or willfully delaying the performance and completion of the work.
- 5.1.6. The Contractor(s) refuses to proceed with work when and as directed by the County Debris Management Center.
- 5.1.7. The Contractor(s) abandons the work.
- 5.1.8. The Contractor(s) employs subcontract who are on the Federal debarred listing.

## **6.0 PERFORMANCE SCHEDULE**

- 6.1. Immediately following Contract Award, the apparent responsible bidder(s) will meet with the County Debris Manager to discuss matters of judgment, safety, quality control, coordination, payment, record keeping, and reporting.
- 6.2. At each vegetative debris reduction site, the Contractor(s) is required to grind a minimum of 200-250 cubic yards per hour per grinder with 4 hours of down time for service per 24 hours. The minimum required reduction/disposal rate shall be achieved no later than the third calendar day after receipt of Notice to Proceed. Liquidated damages shall be assessed at \$500.00 per calendar day for any day in which the minimum processing rate is not met, unless non-compliance is due to insufficient debris amounts being delivered to the site.
- 6.3. All work, including site restoration prior to close-out, shall be completed within 30 calendar days after receiving notice from the County Debris Management Center that the last load of debris has

been delivered, unless the County Debris Manager initiates additions or deletions to the contract by written change orders. Subsequent changes in completion time will be equitably negotiated by both parties pursuant to applicable state and federal law. Liquidated damages shall be assessed at \$1,000.00 per calendar day for any time over the maximum allowable time established above.

- 6.4. Unless directed otherwise by the County Debris Management Center, the Contractor(s) shall conduct volumetric reduction operations 24 hours per day, 7 days per week. Hauling of debris from rights-of-way and public property will be limited to day-light hours, 7 days per week.

## **7.0 CONTRACTOR(S) PETROLEUM, OIL, LUBRICANT (POL) SPILLS**

- 7.1 The Contractor(s) shall be responsible for reporting to the County Debris Management Center and cleaning up all petroleum, oil, lubricant (POL) spills caused by the Contractor(s)'s operations at no additional cost.

- 7.2 Immediate containment actions shall be taken as necessary to minimize effect of any spill or leak. Cleanup shall be in accordance with applicable Federal and local laws and regulations.

- 7.3 Spills other than on-the-site shall be reported to the National Response Center, and the County Debris Management Center immediately following discovery. A written follow-up shall be submitted to the County Debris Management Center not later than 7 days after the initial report. The written report shall be in narrative form, and as a minimum shall include the following:

- Description of the material spilled (including identity, quantity, etc.).
- Determination as to whether or not the amount spilled is EPA/State reportable, and when and to whom it was reported.
- Exact time and location of spill, including description of the area involved.
- Receiving stream or waters.
- Cause of incident and equipment and personnel involved.
- Injuries or property damage.
- Duration of discharge.
- Containment procedures initiated.
- Summary of all communications the Contractor(s) has had with press or other officials.
- Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.
- Corrective actions taken to prevent reoccurrence of similar event.

## **EXHIBIT B**

### **PRICE PROPOSAL FORM**

*(Exhibit B is strictly a sample and must be reviewed by local legal staff before use)*  
*(NOTE: Standardized City Procurement procedures will be adhered to on all RFPs)*

**PRICE PROPOSAL FORM**  
**DISASTER DEBRIS REMOVAL, REDUCTION, AND DISPOSAL**  
**RFP NO**

**PART A – Volume based pricing for 1,000,000 cubic yard debris disaster**

Item/Description	Estimated		Unit Price	Extension
	Quantity	Unit		
<b>1.0 Debris Removal and Disposal Operations</b>				
1.1 Pickup from Public Property or maintained Rights of Way and hauling to a designated Temporary Debris Staging and Reduction (TDSR) site or Disposal Facility 15 or less miles away (one-way miles). (Trips with one-way miles in excess of 15 miles compensated at the rate quoted in Items 1.2., 1.3 or 1.4).	800,000	CY		
1.2 Pickup from Public Property or maintained Rights of Way and hauling to a designated Temporary Debris Staging and Reduction (TDSR) site or Disposal Facility 16 to 30 miles away (one-way miles). (Trips with one-way miles in excess of 30 miles compensated at the rate quoted in Items 1.3 or 1.4).	200,000	CY		
1.3 Pickup from a Temporary Debris Transfer site and hauling to a designated Disposal Facility 31.0 to 60.0 miles away (one-way miles). Volume reduction will not take place. (Trips with one-way miles in excess of 60 miles compensated at the rate quoted in Item 1.4).	200,000	CY		
1.4 Pickup from a Temporary Debris Transfer site and hauling to a Disposal Facility 61.0 – 120.0 miles away (one-way miles). Volume reduction will not take place.	100,000	CY		

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

<b>2.0 Removal and Disposal of Stumps and Hazardous Limbs</b>				
2.1 Extract, remove and dispose of the eligible stump and root ball and back filling of the root cavity with compacted soil of trees that are not uprooted and larger than 24 inches in diameter (measured two feet from the ground). Stumps must have more than 50% of their root ball exposed. Stumps placed along maintained Rights of Way by others will be paid under Items 1.1 through 1.4 above. (See NOTE 2 below).	200	Each		
2.2 Removal and disposal of hazardous hanging limbs greater than 2 inches in diameter.	1,000	Each Tree		
<b>3.0 Temporary Debris Staging and Reduction Site Operations</b>				
3.1 Temporary Debris Management Site operation, debris acceptance, pile management, and material loading for transport. Price includes construction of inspection towers as specified in the scope of work.	1,000,000	CY		
3.2 Volume reduction of debris through grinding and/or chipping. (See NOTE 3 below)	1,000,000	CY		
3.3 Volume reduction through air curtain incineration. (See NOTE 3 below)	1,000,000	CY		
<b>4.0 Grand Total</b>				

**NOTES:**

1. Unit Prices, unless otherwise indicated, shall include all labor (operators, laborers, and supervisors), equipment and materials including but not limited to: supplies, equipment maintenance, repairs, repair parts, fuels, lubricants, cellular phones, transportation, traffic control and housing, if required, necessary to accomplish the project. The quantities and distributions are estimated for the purpose of making an award. Locations of sites, debris quantities, destinations, material densities, etc. may differ substantially in an actual disaster.

2. Stumps less than 24 inches in diameter, with attached root balls, will be considered to be normal debris and payment for loading, hauling, and dumping shall be provided under Items 1.1 through 1.4. Removal and disposal of all stumps, regardless of shape, size or weight, that are placed on

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

the rights-of-way by others (i.e. contractors did not extract them from public property or property of eligible Private Non Profit organization will be at the unit cost rate (Items 1.1 through 1.4) for regular debris using the Stump Conversion Table shown below which was develop by FEMA.

3. To determine the cubic yards for grinding or burning stumps with root balls greater than 24 inches in diameter, the CONTRACTOR shall count the number of stumps and based on their diameter, use the table below to convert to cubic yards. This calculated volume related to stumps greater than 24 inches in diameter can be added to the volume of other debris for purposes of reduction and payment under Items 3.2 (Grinding) and 3.3 (Incineration).

**STUMP CONVERSION TABLE**

<b>Stump Diameter (Inches)</b>	<b>Cubic Yards</b>	<b>Stump Diameter (Inches)</b>	<b>Cubic Yards</b>	<b>Stump Diameter (Inches)</b>	<b>Cubic Yards</b>
6	0.3	33	7.8	60	25.8
7	0.4	34	8.3	61	26.7
8	0.5	35	8.8	62	27.6
9	0.6	36	9.3	63	28.4
10	0.7	37	9.8	64	29.4
11	0.9	38	10.3	65	30.3
12	1	39	10.9	66	31.2
13	1.2	40	11.5	67	32.2
14	1.4	41	12	68	33.1
15	1.6	42	12.6	69	34.1
16	1.8	43	13.3	70	35.1
17	2.1	44	13.9	71	36.1
18	2.3	45	14.5	72	37.2
19	2.6	46	15.2	73	38.2
20	2.9	47	15.8	74	39.2
21	3.2	48	16.5	75	40.3
22	3.5	49	17.2	76	41.4
23	3.8	50	17.9	77	42.5
24	4.1	51	18.6	78	43.6
25	4.5	52	19.4	79	44.7
26	4.8	53	20.1	80	45.9
27	5.2	54	20.9	81	47
28	5.6	55	21.7	82	48.2
29	6	56	22.5	83	49.4
30	6.5	57	23.3	84	50.6
31	6.9	58	24.1		
32	7.3	59	24.9		

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

**Part B – Hourly Prices**

For Temporary Debris Staging and Reduction Site Set-up and Closure and Debris Clearance for First 70 Hours			
Equipment and Labor Rates			
Equipment Type	Hourly Equipment Rate	Hourly Labor Rate	Total Hourly Rate
Air Curtain Pit Burner			
Air Curtain Refractory Incinerator			
Bobcat Loader			
Bucket Truck w/Operator			
Chipper/Mulcher (8" throat)			
Chipper/Mulcher (12" throat)			
Crash Truck w/Impact Attenuator			
Crew Foreman w/Cell Phone and Pickup			
Dozer, Tracked, D5 or similar			
Dozer, Tracked, D6 or similar			
Dozer, Tracked, D7 or similar			
Dozer, Tracked, D8 or similar			
Dump Truck, 18 CY-20 CY			
Dump Truck, 21 CY-30 CY			
Generator and Lighting			
Grader w/12' Blade			
Hydraulic Excavator, 1.5 CY			
Hydraulic Excavator, 2.5 CY			
Knuckleboom Loader			
Laborer w/Chain Saw			
Laborer w/small tools, traffic control, flag person			
Lowboy Trailer w/Tractor			
Log Skidder			
Mobile Crane (Adequate for hanging limbs/leaning trees)			
Operations Manager w/Cell Phone and Pickup			
Pickup Truck, .5 Ton			

**CITY OF FAIRFAX DEBRIS MANAGEMENT PLAN**

<b>For Temporary Debris Staging and Reduction Site Set-up and Closure and Debris Clearance for Access</b>			
<b>Equipment and Labor Rates</b>			
<b>Equipment Type</b>	<b>Hourly Equipment Rate</b>	<b>Hourly Labor Rate</b>	<b>Total Hourly Rate</b>
Soil Compactor 80 HP			
Soil Compactor 81 HP+			
Soil Compactor, Towed Unit			
Stump Grinder 30" diameter or less			
Stump Grinder greater than 30" diameter			
Traffic Control, Temporary Single Lane Closure			
Traffic Control, Temporary Road Closure			
Tree Climber s/Chainsaw			
Truck, Flatbed			
Tub Grinder, 800 to 1,000 HP			
Waste Collection Rear Loader Truck			
Water Truck			
Wheel Loader, 2.5 CY, 950 or similar			
Wheel Loader, 3.5 – 4.0 CY, 966 or similar			
Wheel Loader, 4.5 CY, 980 or similar			
Wheel Loader-Backhoe, 1.0 – 1.5 CY			
Other – Please List			

Part B unit prices for equipment such as: air curtain burners/incinerators, chipper/mulchers and tub grinders do not pertain to debris management site operations, which are included under Part A.

Part B unit prices for Traffic Control do not pertain to debris collection and removal operations from public property and public maintained Rights-of-Way, which are included under Part A.

## **EXHIBIT C**

### **SAMPLE REQUEST FOR LETTERS OF INTEREST DEBRIS LOADING SITE MONITORS, DEBRIS REDUCTION/DISPOSAL SITE MONITORS, AND ROVING DEBRIS MONITORS**

*(Exhibit C is strictly a sample and must be reviewed by local legal staff before use)*  
*(NOTE: Standardized City Procurement procedures will be adhered to on all RFPs)*

Date:

Subject: Request for Letters of Interest for Disaster Debris Monitoring

The \_\_\_\_\_ invites qualified firms to submit Letters of Interest and Statements of Qualification and Experience for consideration to provide services on the following project:

### **DISASTER DEBRIS MONITORING**

The scope of services shall include, but not be limited to the following:

The \_\_\_\_\_ seeks qualified firm(s) to assist in monitoring disaster debris collection and disposal operations on behalf of the \_\_\_\_\_ ensuring compliance with federal requirements and local debris management plans as related to contractor oversight, load ticket preparation and issuing, report preparation and project administration.

The Contractor shall provide personnel to monitor at least \_\_\_\_\_ (\_\_\_\_) debris loading sites and up to \_\_\_\_\_ (\_\_\_\_) personnel to monitor debris reduction/disposal sites located in \_\_\_\_\_ County/City. Each site will operate approximately 12-14 hours per day, 7 days per week. The exact number and location of sites will be determined by \_\_\_\_\_. The Contractor shall also provide at least \_\_\_\_\_ (\_\_\_\_) roving debris monitors.

Contractor shall provide all management, supervision, labor, transportation, and equipment necessary to initiate load tickets at debris loading sites, estimate the volume of debris (in cubic yards, or other standard unit of measurement as determined by \_\_\_\_\_) being delivered by trucks to each debris reduction/disposal site and support the operations of the roving debris monitors .

- Scope of Work for Debris Loading Site Monitors and Debris Reduction/Disposal Site Monitors: See Attachment 1.
- Scope of Work for Debris Roving debris monitors: See Attachment 2.
- Sample Service Agreement

The Letter of Interest (LOI) should be limited to 8 pages and address the following:

- Office location responsible for this project.
- Project manager and key personnel.
- Evidence of satisfactory completion of disaster debris monitoring in the past five (5) years at similar jurisdictions. Narrative should include scope, project budget, and operational duration. Include the firm's contract manager and phone number and e-mail address (if available) for each disaster response or project. Summarized information on each response should include:
  - Type of disaster - hurricane, tropical storm, tornado, etc.
  - Type of jurisdiction - city, county, district or combinations,
  - Collection monitoring assignments,
  - Temporary debris management site monitoring assignments,
  - Final disposal oversight functions,
  - FEMA reimbursement actions and issue resolution

- Knowledge and experience with \_\_\_\_\_'s solid waste regulations and the disaster debris management policies.
- List of references.
- Subconsultant(s) that may be used on this project.
- Three (3) year claims/litigation history and status.

Any material received that is not requested may be discarded. Bindery (except removable fasteners) in any form is not preferred, nor are specially prepared covers, dividers, tables of content, organizational charts, reference letters, etc.

The evaluations made as a result of reviewing the above information from each firm will be a part of the basis for developing a shortlist of firms who may be scheduled to make presentations before the Selection/Negotiation Committee, and may serve as continuing information for the final ranking.

### **SELECTION/NEGOTIATION PROCESS**

A Selection/Negotiation Committee (S/NC) has been appointed by the \_\_\_\_\_, and will be responsible for recommending the most qualified firm(s) with whom to begin negotiation of an agreement for this project. It is anticipated, but not required, that the process for this procurement proceed in the following manner:

### **REVIEW OF WRITTEN SUBMITTALS**

Each firm should submit documents that provide evidence of capability to provide the services required for this project. Each short listed firm will be contacted via telephone and follow-up letter to advise of date and time for presentations/interviews.

The \_\_\_\_\_ will not consider oral/written communications, prior to the conclusion of short listing firms, which vary the terms of the submittals.

### **PRESENTATIONS/INTERVIEWS**

The S/NC may provide a list of subject matter for discussion. Each short listed firm will be given equal time to make presentations, but the question-and-answer time may vary. The S/NC may ask each short listed firm to provide prices in a sealed envelope at time of presentation. See Attachment 3 -Fee Schedule for Debris Loading Site Monitors, Debris Reduction/Disposal Site Monitors and Debris Roving debris monitors.

Recommendation to begin negotiations with the selected firm will be made by the S/NC and reported to the appointing authority.

All inquiries are to be directed to \_\_\_\_\_ at \_\_\_\_\_.

Interested firms should submit four (4) total copies of materials which indicate interest and qualifications to:

Submittals **MUST BE RECEIVED** by the \_\_\_\_\_ no later than 5:00 pm on \_\_\_\_\_, 200\_. Electronically transmitted, and late or misdirected submittals will not be accepted.

Signature\_\_\_\_\_

**DEBRIS LOADING SITE MONITORS, DEBRIS REDUCTION/DISPOSAL SITE  
MONITORS, AND ROVING DEBRIS MONITORS**

\_\_\_\_\_ COUNTY, \_\_\_\_\_

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_, by and between \_\_\_\_\_ County, \_\_\_\_\_, party of the first part; and \_\_\_\_\_ (the "Contractor"), party of the second part;

**W I T N E S S E T H:**

For the purpose and subject to the terms and conditions hereinafter set forth, the County hereby contracts for the services of the Contractor, and the Contractor agrees to provide the services to the County in accordance with the terms of this Agreement.

**I. SERVICES TO BE PROVIDED**

The services to be performed by the Contractor shall be as follows:

- **ATTACHMENT 1: Debris Loading Site and Debris Reduction/Disposal Site Monitors**
- **ATTACHMENT 2: Roving Debris Monitors**

**II. TERM**

The services of the Contractor shall begin not later than 48 hours after Notice to Proceed, and unless sooner terminated by mutual consent or as hereinafter provided, shall be provided until \_\_\_\_\_; provided that Contractor shall have the right to terminate this Agreement for services upon thirty (30) days' notice in writing to the County, and the County shall have the right to terminate this Agreement upon five (5) days' notice in writing to the Contractor. This Agreement is subject to the availability of funds provision of section XI. Extension or renewal clause i.e. 3 –one year options.

**III. PAYMENT**

As full compensation for the Contractor's services, the County agrees to pay the Contractor the sum of \_\_\_\_\_, payable in installments based on the **Fee Schedule at Attachment 3**. Total payments under this contract are not to exceed \_\_\_\_\_ during fiscal year \_\_\_\_\_.

The Contractor shall bill the County for services rendered during the preceding thirty (30) days. The County shall pay all undisputed portions of such bills within Thirty (30) days, provided all elements of this Agreement are satisfactorily met.

**IV. RELATIONSHIP OF PARTIES**

The Contractor shall operate as an independent contractor, and the County shall not be responsible for any of the Contractor's acts or omissions. The Contractor shall not be treated as an employee with respect to the services performed hereunder for federal or state tax, unemployment or workers' compensation purposes. The Contractor understands that neither federal, nor state, nor payroll tax of any kind shall be withheld or paid by the County on behalf of the Contractor or the employees of

the Contractor. The Contractor further agrees that the Contractor is fully responsible for the payment of any and all taxes arising from the payment of monies under this Agreement. The Contractor shall not be treated as an employee with respect to the services performed hereunder for purposes of eligibility for, or participation in, any employee pension, health, or other fringe benefit plan of the County. The County shall not be liable to the Contractor for any expenses paid or incurred by the Contractor unless otherwise agreed in writing. The Contractor shall supply, at its sole expense, all equipment, tools, materials, and supplies required to provide the contracted services unless otherwise agreed in writing. The Contractor shall comply with all federal, state and local laws regarding business permits, certificates and licenses that may be required to carry out the services to be performed under this Agreement. The Contractor shall insure that all personnel engaged in work under this Agreement shall be fully qualified and shall be authorized under state and local law to perform the services under this Agreement.

## V. INSURANCE

The Contractor shall obtain, at his sole expense, all insurance required in the following paragraphs and shall not commence work until such insurance is in effect and certification thereof has been received by \_\_\_\_\_.

Workers' Compensation Insurance, with limits for Coverage A Statutory-State of \_\_\_\_\_ and Coverage B Employers Liability \$500,000 each accident, disease policy limit and disease Each Employee.

Commercial General Liability - Combined single limits of no less than \$1,000,000 each occurrence and \$2,000,000 aggregate. This insurance shall include Comprehensive Broad Form Coverage including contractual liability.

Commercial Automobile Liability, with limits of no less than \$500,000 Combined Single Limit for bodily injury and property damage. Evidence of commercial automobile coverage is only necessary if vehicles are used in the provision of services under this Agreement and/or are brought on a \_\_\_\_\_ County site.

All insurance companies must be licensed in \_\_\_\_\_ and be acceptable to the County's Risk Manager. Insurance Policies, except Workers' Compensation, shall be endorsed (1) to show \_\_\_\_\_ County as additional insured, as their interests may appear and (2) to amend cancellation notice to 30 days, pursuant to \_\_\_\_\_ law. Certificates of insurance shall be signed by a licensed \_\_\_\_\_ agent and be amended to show "thirty (30) days' notice of change or cancellation will be given to the \_\_\_\_\_ County Risk Manager by certified mail."

If an "ACCORD" Insurance Certificate is used, the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company" in the "cancellation" paragraph of the form shall be deleted. Copies or originals of correspondence, certificates, endorsements or other items pertaining to insurance shall be sent to:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

If the Contractor does not meet the insurance requirements of the specifications, alternate insurance coverage satisfactory to \_\_\_\_\_ County may be considered.

## VI. INDEMNIFICATION

The Contractor agrees to defend, indemnify, and hold harmless \_\_\_\_\_ County from all loss, liability, claims or expense (including reasonable attorney's fees) arising from bodily injury, including death, to any person or persons or property damage caused in whole or in part by the negligence or misconduct of the Contractor or his/her subcontractors, agents and employees, except to the extent same are caused by the negligence or willful misconduct of \_\_\_\_\_ County. It is the intent of this section

to require the Contractor to indemnify \_\_\_\_\_ County to the extent permitted under (leave STATE blank for template purposes) law.

**VII. NON-ASSIGNMENT**

The Contractor shall not assign all or any portion of this Agreement, including rights to payments, to any other party without the prior written consent of the County.

**VIII. ENTIRE AGREEMENT**

The Contractor and the County agree that this document constitutes the entire agreement between the two parties and may only be modified by a written mutual agreement signed by the parties. Modifications may be evidenced by telefacsimile signatures. Unless and until further modified, this agreement shall consist of this document and the following attachments or addenda:

**IX. GOVERNING LAW**

Both parties agree that this Agreement shall be governed by the laws of the State of \_\_\_\_\_.

**X. WAIVER**

Failure of the County to enforce, at any time, any of the provisions of this Agreement, or to request at any time performance by Contractor of any of the provisions hereof, shall in no way be construed to be a waiver of such provisions, nor in any way affect the validity of this Agreement or any part thereof, or the right of the County to enforce each and every provision.

**XI. NON-APPROPRIATION**

If this agreement requires performance and appropriations for payment for services in future fiscal years, the validity of this contract is based upon the availability of public funding under the statutes delegating the County its powers. In the event that the County's enabling legislation is changed so as to prohibit the activities contemplated by this contract or should public funds become unavailable and not appropriated for the continuation of this contract, the parties' obligations hereunder will automatically expire without penalty ten (10) days after written notice to the Contractor of such occurrence. It is understood that the County will not exercise this provision for its convenience, but only as an emergency fiscal measure.

IN WITNESS WHEREOF, the County and the Contractor have set their hands as of the day and year first above written.

\_\_\_\_\_  
COUNTY, \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

**CONTRACTOR**

By: \_\_\_\_\_

Date: \_\_\_\_\_

(Mailing Address)

\_\_\_\_\_

\_\_\_\_\_

Federal Tax ID# \_\_\_\_\_

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

\_\_\_\_\_  
FINANCE OFFICER

**SCOPE OF WORK  
FOR  
DEBRIS LOADING SITE MONITORS AND REDUCTION/DISPOSAL SITE  
MONITORS**

**1.0 GENERAL**

1.1 The \_\_\_\_\_ County \_\_\_\_\_ requires debris loading site monitors to initiate load tickets and reduction/disposal site monitors to verify the volume of debris delivered to either temporary debris management sites or permanent disposal or recycling facilities as determined by County/City Debris Manager.

**2.0 LOADING SITE MONITORING SERVICES**

2.1 Contractor shall provide on site personnel to monitor debris removal operations at up to \_\_\_\_ (\_\_) debris loading sites located throughout \_\_\_\_\_ County. Each loading site will operate approximately 12 -14 hours per day, 7 days per week. Exact number and location of loading sites will be determined by \_\_\_\_\_ in coordination with the debris removal Contractor.

- **Urban Area Monitoring Sites:** Contractor will have load site monitors stationed at designated "Choke Points" chosen by the debris removal Contractor and coordinated with the \_\_\_\_\_ representative the day before. The "Choke Points" must be kept to a minimum and located at a safe site along the primary haul road to the designated reduction/disposal site. A minimum of \_\_\_\_\_ load site monitors will be stationed at the "Choke Point" and each truck driver will be given a load ticket that validates where the material originated and that it is eligible for pickup. The load ticket must contain either a street address or the nearest intersection to be valid. The volume of debris hauled will be estimated at the reduction/disposal site by the Disposal Site Monitor. The estimated volume will be recorded on the load ticket and a copy of the load ticket given to the truck driver.
- **Rural Area Monitoring Sites:** Contractor will have load site monitors stationed at each rural loading site being operated by the debris removal and disposal Contractor. Rural area loading sites must be identified by the Contractor and coordinated with the \_\_\_\_\_ representative the day before. A minimum of \_\_\_\_\_ load site monitors will be stationed at the actual loading site and will give each truck driver a load ticket that validates where the material originated and that it is eligible for pickup. The load ticket must contain either a street address or the nearest intersection to be valid. The volume of debris hauled will be estimated at the disposal site by the Disposal Site Monitor. The estimated volume will be recorded on the load ticket and a copy of the load ticket given to the truck driver.

2.2 Contractor shall provide all management, supervision, labor, transportation, and equipment necessary to initiate debris load tickets to document the removal of eligible debris from Public Access Roads within \_\_\_\_\_ County.

2.3 Contractor must provide reduction/disposal site monitors with personnel protective equipment to include but not limited to eye protection, hearing protection, work shoes, safety vest, hard hats, and wet and cold weather clothing.

2.4 Contractor shall provide \_\_\_\_ loading site monitors per site per day for a 12-14 hour shift. Contractor must provide personnel with transportation, mobile communications, and all logistic support.

2.5 All loading site monitors must be a minimum of 18 years of age and have a valid driver's license.

2.6 All loading site monitors site monitors must have experience in at least one of the following:

- Entry level engineer
- Construction inspector
- Entry level surveyor
- Solid waste collections
- Previous monitoring experience
- National debris monitoring certification

2.7 Supervisors and all identified loading site monitors must attend a ½ day debris monitor training session to be conducted at a location specified by the \_\_\_\_\_ Project Officer before the start of the first shift.

### **3.0 DEBRIS REDUCTION/DISPOSAL SITE MONITORING SERVICES**

3.1 Contractor must provide reduction/disposal site monitors with personnel protective equipment to include but not limited to eye protection, hearing protection, work boots, safety vest, hard hats, and wet and cold weather clothing. Communication equipment to correspond to dispatch, field monitors, etc.

3.2 Contractor must provide reduction/disposal site monitors with transportation to and from the debris reduction site and logistic support.

3.3 Contractor must provide a portable non-electric heating unit and warm-up tent (for cold weather operations only) for each on-site inspection tower.

3.4 Monitors must be capable of spending shifts in an outside environment and be able to climb a staircase ladder of 10 feet high.

3.5 Monitors must be a minimum of 18 years of age and have a valid driver's license.

3.6. Monitors must have experience in at least one of the following:

- Entry level engineer
- Construction inspector
- Entry level surveyor
- Solid waste site operations
- Land clearing operations
- Previous monitoring experience
- National debris monitoring certification

3.7 Supervisors and all identified reduction/disposal site monitors must attend a ½ day debris monitor training session to be conducted at a location specified by the \_\_\_\_\_ Project Officer before the start of the first shift.

#### 4.0 OPERATIONAL REQUIREMENTS

4.1 General Operating Procedures: The County has hired a Contractor (s) to remove and transport disaster debris from the right-of-way of Public Access Roads within \_\_\_\_\_ County to designated debris reduction/disposal sites. Each load of eligible debris will be tracked using a multi-page load ticket similar to the one shown in Figure 1 below.

Debris Load Ticket	
County/Municipality Name: _____	
Ticket Number: _____	
Contractor's Name: _____	
Driver's Name: _____	
Truck / Trailer Number: _____	
Measured Bed Capacity in Cubic Yards: _____	
Departure Date: _____	Departure Time: _____
Pickup Site Location (Must be street address or nearest intersection): DOT System Road: _____ Public Access Road: _____ Federal Highway: _____ Other: _____	
Type of Debris:	
<input type="checkbox"/>	Burnable (Clean Woody Debris)
<input type="checkbox"/>	Non-Burnable (Treated Lumber, Metals, C&D)
<input type="checkbox"/>	Mixed ( Burnable and Non-Burnable)
<input type="checkbox"/>	Other (Define) _____
Printed Name of Loading Site Monitor: _____	
Signature: _____	
Debris Disposal Site Location: _____	
Arrival Time: _____	
Estimated Volume of Debris on Truck: _____ Cubic Yards	
Printed Name of Disposal Site Monitor: _____	
Signature: _____	
Remarks: _____	

Figure 1

#### 4.2 Load Ticket Section 1:

The debris load site monitor will be responsible for completing the information shown in Figure 2 below. The load site monitor will retain one copy of the load ticket and give the remaining copies to the truck driver.

<b>Debris Load Ticket</b>	
County/Municipality Name: _____	
Ticket Number: _____	
Contractor's Name: _____	
Driver's Name: _____	
Truck / Trailer Number: _____	
Measured Bed Capacity in Cubic Yards: _____	
Departure Date: _____	Departure Time: _____
Pickup Site Location (Must be street address or nearest intersection): DOT System Road: _____ Public Access Road: _____ Federal Highway: _____ Other: _____	
Type of Debris:	
<input type="checkbox"/>	Burnable (Clean Woody Debris)
<input type="checkbox"/>	Non-Burnable (Treated Lumber, Metals, C&D)
<input type="checkbox"/>	Mixed ( Burnable and Non-Burnable)
<input type="checkbox"/>	Other (Define) _____
Printed Name of Loading Site Monitor: _____	
Signature: _____	

Figure 2

#### 4.3 Load Ticket Section 2:

The reduction/disposal site monitor is responsible for completing the remaining sections of the load ticket. The reduction/disposal site monitor will verify that all required information is completed by the loading site monitor. After verifying that Section 1 is complete, the monitor in the inspection tower will make an estimate of the volume of debris contained in the truck or trailer in cubic yards. Each truck or trailer will have the measured size in cubic yards recorded on the side of the truck or trailer. That number should be validated with the volume stated in Section 1.

Debris Disposal Site Location: _____	
Arrival Time: _____	
Estimated Volume of Debris on Truck: _____	Cubic Yards
Printed Name of Disposal Site Monitor: _____	
Signature: _____	
Remarks: _____	

Figure 3

The reduction/disposal site monitor will indicate the name of the debris reduction site, arrival time of the truck, and estimate the volume of material contained within the bed of the truck or trailer. The estimated volume will be recorded on the load ticket in the Estimated Debris Volume block and the debris reduction/disposal site monitor will print his/her name and sign in the designated block. The reduction/disposal site monitor will retain one copy of the load ticket and give the remaining copies to the truck driver. The reduction/disposal site monitor's copy will be turned into their supervisor at the end of each day. These are controlled forms and cannot be lost since they will be used to verify the amount of money paid to the debris reduction/disposal site Contractor and to the debris hauling Contractor.

## **5.0 REPORTING**

5.1 The loading site monitor will turn in their copy of the load ticket to their supervisor at the end of each shift. The Contractor's supervisor will ensure that the load tickets and log are submitted to the \_\_\_\_\_ Project Officer not later than 10am the following day.

5.2 The loading site monitors will also maintain a log that contains the following information:

- a) Debris "Choke Point" or loading site location
- b) Loading Site Monitors' Name
- c) Supervisor's Name
- d) Number of Load Tickets issued during the shift
- e) Starting load ticket number \_\_\_\_\_ Ending load ticket number \_\_\_\_\_.
- f) Any problems encountered or anticipated

5.3 The reduction/disposal site monitor will turn in their copy of the load ticket to their supervisor at the end of each shift. The Contractor's supervisor will ensure that the load tickets and log are submitted to the \_\_\_\_\_ Project Officer not later than 10am the following day.

5.4 The reduction/disposal site monitors will maintain a log that contains the following information:

- a) Debris reduction/disposal site location
- b) Reduction/Disposal Site Monitors' Name
- c) Supervisor's Name
- d) Truck/Trailer number and volume of debris hauled into the site.
- e) Cumulative total of debris delivered at the site during the shift.
- f) Any problems encountered or anticipated

5.5 The Contractor will provide reduction/disposal site monitors with a means of communications (cell phone, radio, etc.) to contact their supervisor or the \_\_\_\_\_ Project Officer in the event of any problems that occur. Monitors should not argue with truck drivers or other Contractor personnel. They are advised to wait until a supervisor arrives on site to resolve the problem.

## **6.0 SAFETY**

6.1 The Contractor's loading site monitors and reduction/disposal site monitors must wear required safety equipment whenever on the site. The following are mandatory: Hard Hat, Reflective Vest, Work Boots, Long Pants, Appropriate Cold and Rainy Weather Clothing, Eye and Hearing Protection.

6.2 The Contractor will maintain a telephonic contact list at each loading site and reduction/disposal site of the Contractor's supervisor, \_\_\_\_\_ Project Officer, and nearest fire, police, and emergency medical facilities.

## **7.0 OTHER CONSIDERATIONS**

7.1 The Contractor shall supervise and direct the work, using qualified labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of this contract.

7.2 The Contractor must be duly licensed in accordance with \_\_\_\_\_ State statutory and regulatory requirements to perform the work. The Contractor shall obtain all permits necessary to complete the work. The Contractor shall be responsible for determining what permits are necessary to perform under the contract. Copies of all permits shall be submitted to the \_\_\_\_\_ Project Officer before commencing work.

7.3 The Contractor shall be responsible for correcting any notices of violations issued as a result of the Contractors or any subcontractors' actions or operations during the performance of this contract. Corrections for any such violations shall be at no additional cost to the \_\_\_\_\_.

7.4 The Contractor shall be responsible for paying any and all costs associated with violations of law or regulation relative to his/her activities. Such costs might include but are not limited to: site cleanup and/or remediation; fines, administrative or civil penalties; and third party claims imposed on \_\_\_\_\_ by any regulatory agency or by any third party as a result of noncompliance with Federal, State, or local environmental laws and regulations or nuisance statutes by Contractor, his/her Subcontractors, or any other persons, corporations or legal entities retained by the Contractor under this contract.

7.5 Meetings. The Contractor must attend any and all meetings required by \_\_\_\_\_ to evaluate the performance of all monitors.

7.6 Quality Assurance. The Contractor must provide sufficient personnel and management to assure the policies and procedures of work meets the requirements of this contract. The work will be closely monitored by \_\_\_\_\_.

## **8.0 PAYMENT**

8.1 Project Manager. The unit price must be at the Contractor's standard billing rate

8.1 Supervisor. The unit price must be at Contractor's standard billing rate

8.2 Loading Site Monitor. The unit price must be at Contractor's standard billing rate

## **SCOPE OF WORK FOR ROVING DEBRIS MONITORS**

### **1.0 GENERAL**

1.1 The \_\_\_\_\_ requires roving debris monitors to verify that only eligible debris is being removed from designated public access roads within assigned debris pickup zones in \_\_\_\_\_ County.

### **2.0 ROVING DEBRIS MONITOR SERVICES**

2.1 Contractor shall provide \_\_\_\_\_ (\_\_\_\_) roving debris monitors. At least one monitor will be assigned a Debris Pickup Zone to monitor and verify eligible debris removal from designated Public Access Roads within the Debris Pickup Zone. The roving monitor(s) must be prepared to operate approximately 8 to 10 hours per day, 7 days per week.

2.2 Contractor must provide roving debris monitors with transportation (only compact rental cars authorized) and mobile communications equipment necessary to remain in contact with dispatch, supervisor and towers at all times..

2.3 All roving site monitors must be a minimum of 18 years of age and have a valid driver's license.

2.4. All monitors must have experience in at least one of the following:

- Entry level engineer
- Construction inspector
- Entry level surveyor
- Solid waste collections
- Previous monitoring experience
- National debris monitoring certification

2.5 Supervisors and all identified roving debris monitors must attend a ½ day debris monitor training session to be conducted at a location specified by the \_\_\_\_\_ Project Officer before the start of the first shift.

2.6 Contractor shall provide all management, supervision, labor, transportation, and equipment necessary to monitor the operations of the debris removal and disposal Contractor.

2.7 Contractor must provide monitors with personnel protective equipment to include but not limited to eye protection, hearing protection, work boots, safety vest, hard hats, and wet and cold weather clothing.

2.8 Roving debris monitors must be capable of spending shifts in an outside environment and be able to climb a staircase ladder of 10 feet high.

### **3.0 OPERATIONAL REQUIREMENTS**

3.1 The roving monitor(s) will provide oversight of all debris removal and disposal operations provided by the debris removal and disposal contractor.

3.2 The roving monitor(s) will be the "eyes and ears" in the field for the County Debris Manager. Therefore their observations and reports must be backed up with digital photographs when ever possible.

3.3 The roving monitor(s) are expected to make multiple visits to all loading sites and disposal sites on a random daily basis.

#### **4.0 REPORTING**

4.1 The Roving Monitor(s) will be responsible for completing the Debris Removal/Loading Site Monitoring Checklist at Attachment 4. Report will be submitted to immediate supervisor on a daily basis.

4.2 The Roving Monitor(s) will report any serious or safety related discrepancies observed to his/her supervisor. Supervisor will keep \_\_\_\_\_ Project Officer informed of situations that impact on the execution of the debris removal contract.

4.3 The supervisor will collect all written reports and provide them to the \_\_\_\_\_ Project Officer by 10:00 am the following day.

4.4 The Contractor will provide site monitors with a means of communications (cell phone, radio, etc.) to contact their supervisor or the \_\_\_\_\_ Project Officer in the event of any problems that occur at the inspection site. Monitors should not argue with truck drivers or other Contractor personnel. Advise them to wait until a supervisor arrives on site to resolve the problem.

#### **5.0 SAFETY**

5.1 The Contractor will ensure that roving debris monitors adhere to the debris reduction site Contractor's safety requirement.

5.2 The Contractor's roving debris monitors must wear their required safety equipment whenever on the site. The following are mandatory: Hard Hat, Reflective Vest, Steel Toe Shoes, Long Pants, Appropriate Cold and Rainy Weather Clothing, Eye and Hearing Protection.

5.3 Each roving monitor will maintain a telephonic contact list of all of the Contractor's supervisors, \_\_\_\_\_ Project Officer, and nearest fire, police, and emergency medical facilities for each of their assigned debris zones.

#### **6.0 OTHER CONSIDERATIONS**

6.1 The Contractor shall supervise and direct the work, using qualified labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of this contract.

6.2 The Contractor must be duly licensed in accordance with \_\_\_\_\_ State statutory and regulatory requirements to perform the work. The Contractor shall obtain all permits necessary to complete the work. The Contractor shall be responsible for determining what permits are necessary to perform under the contract. Copies of all permits shall be submitted to the \_\_\_\_\_ Project Officer.

6.3 The Contractor shall be responsible for correcting any notices of violations issued as a result of the Contractors or any subcontractors' actions or operations during the performance of this contract. Corrections for any such violations shall be at no additional cost to the \_\_\_\_\_.

6.4 The Contractor shall be responsible for paying any and all costs associated with violations of law or regulation relative to his/her activities. Such costs might include but are not limited to: site cleanup and/or remediation; fines, administrative or civil penalties; and third party claims imposed on \_\_\_\_\_ by any regulatory agency or by any third party as a result of noncompliance with Federal, State, or local environmental laws and regulations or nuisance statutes by Contractor, his/her Subcontractors, or any other persons, corporations or legal entities retained by the Contractor under this contract.

6.5 Meetings. The Contractor must attend any and all meetings required by the \_\_\_\_\_ to evaluate the operation of the debris reduction site.

6.6 Quality Assurance. The Contractor must provide sufficient personnel and management to assure the policies and procedures of work meets the requirements of this contract. The work will be closely monitored by \_\_\_\_\_.

## **7.0 PAYMENT**

7.1 Project Manager. The unit price must be at Contractor's standard billing rate.

7.2 Supervisor. The unit price must be at Contractor's standard billing rate.

7.3 Roving Monitor. The unit price must be at Contractor's standard billing rate

7.4 Rental Cars: Will be reimbursed based on number and length of time used for rental cars by the roving debris monitors only. Rental cars must be at compact car price. Provide receipts for each rental car used.

7.5 Fuel: Will be reimbursed based on amount of fuel used by rental cars. Must provide receipts for all fuel used.

**DEBRIS LOADING SITE MONITORS, DEBRIS REDUCTION/DISPOSAL SITE  
MONITORS AND ROVING DEBRIS MONITORS**

**FEE SCHEDULE**

ITEM	DESCRIPTION	VOLUME	UNIT OF ISSUE	UNIT PRICE
1.	Project Manager	each	Standard hourly rate	\$
2.	Debris Monitor Supervisor	each	Standard hourly rate	\$
3.	Loading Site Monitor	each	Standard hourly rate	\$
4.	Roving Monitor	each	Standard hourly rate	\$
5.	Reduction Site Monitor	each	Standard hourly rate	\$
6.	Holiday/Over Time	each	Hourly overtime rate	\$
7.	Other Direct Costs for Roving debris monitors Only	<u>Rental Car:</u> (Will be reimbursed based on number and length of time used for rental cars. Rental car must be at compact car price. Must provide receipts for each rental car used).  <u>Fuel:</u> (Will be reimbursed based on amount of fuel used by rental cars. Must provide receipts for all fuel used).		

**CONTRACTOR**

By: \_\_\_\_\_

Date: \_\_\_\_\_

(Mailing Address)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Federal Tax ID#: \_\_\_\_\_

**The following documents must be provided along with the Fee Schedule:**

- Project approach.
- Past experience monitoring field operations.
- List of references.
- Certificates of insurance as required in paragraph V.
- List of company officials.
- Additional services.